

ELECTRICAL CONTRACTOR ~ DEALER

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Electricity's New Words

For several years the retail branch of the electrical industry has been floundering around in a surging sea of meaningless appellatives. In our April issue we ventured to mention this condition as an opportunity for some of the bright minds of the industry to suggest a new term which would readily designate the abundantly named "electrical contractor-dealer."

The responses plainly evidenced the fact that a new name would be gladly welcomed by all concerned; but nothing definite was submitted until a short time previous to the Buffalo Convention, when M. H. Johnson of Utica, past chairman of the New York State Association of Electrical Contractors and Dealers, prepared a paper which conclusively proved that he had given the subject deep thought and study.

Mr. Johnson's paper was presented at the Anniversary Convention and was so favorably received that a resolution was at once offered and unanimously adopted, endorsing his recommendation for the inclusion of his proposed new words. In order that the members of the National Association may be clear on this point, the resolution is reproduced in full herewith:

Whereas, There is need of words to designate our business and activities; and

Whereas, It is proper that we should deliberately add to our vocabulary such properly derived words as are required; now therefore, be it

Resolved, That the following words be adopted as recognized by us with the meanings attached:

Electragy—Name of the trade or business of Electrical Contractor-Dealer.

Electragist—A person conducting such a business.

Electragician—A person working at the business.

Electragize—A verb—to work at the business—or to provide electrical equipment.

Electragic—An adjective—relating to the business.

Electragian

Electragial

Furthermore, Be it resolved that we recommend that proper action be taken to use these words in all work of the Association.

And Furthermore, Be it resolved that these words be legally protected.

Thus it comes that every member, while in good standing, automatically becomes an electragist, engaged in the business

of electragy, and always should be ready to electragize anything requiring the power, force or energy of electricity.

As M. G. Sellers, secretary-treasurer of the Pennsylvania State Association of Electrical Contractors and Dealers said, previous to the adoption of the foregoing resolution and while aiding in the search for a suitable term, the word should denote "character of service rendered to the public." As the National Association aims for the highest point of efficiency in its branch of the electrical industry, let each member in good standing adopt and use the word electragist to express the high quality of service which he renders to the public. The word itself can be made to mean that—provided it is properly used.

Be an electragist, then, in every sense of the word—adopt the name, use it, and make it stand for more than merely conducting an electrical business.

Resumption Week

Poor old business! There is no denying that she has had a hard time of it during the past year. She was quite used up as a result of her wild dissipations during the inflation period. At that time her ribald revelry was uncontrollable—she led her sponsors a merry chase night and day, until she dropped from exhaustion—or perhaps saturation would better express it.

Business was tired. It needed a rest. For months it merely existed on the hangover resulting from its luxuriant spree. Then, wholly overcome by fatigue, it slept—and none there was that had the temerity to awaken it.

Now comes the Pennsylvania Manufacturers' Association with the suggestion that we all join in a movement to force business from its prolonged lethargic stupor. It is proposed that the period of six days, beginning on Labor Day, September 5, be known as Resumption Week; that the public be urged to resume the practice of shopping at that time; that we all purchase to our limit—and that those of us who are not prepared to buy for immediate delivery, should place advance orders during that week.

Resumption Week as planned calls upon everybody to spend money to the utmost limit—the consumer, the retailer, the wholesaler, the manufacturer; public and private institutions; states, cities, towns, and neighborhoods; churches, clubs, and organizations of all kinds—buy or order merchandise of all classes and descriptions at that time.

If this were accomplished, and if even the average purchase would not exceed \$100, the grand total would amount to from five to ten billions of dollars—surely enough not only to thoroughly arouse business from its slumbers, but sufficient to stimulate it to normal and continued activity.

The idea of Resumption Week is so timely and logical that the Society for Electrical Development took up the matter, set its press bureau to work on it, and it reports that newspapers throughout the country are appealing to their readers to join in the movement. As a result of the Society's efforts, electrical interests are helping to popularize the movement.

Let's all help! Do your Resumption Week shopping early—and often! Arouse business and force it into activity!

The Art of Selling

Selling is often called an art because in most cases where it is properly performed it is an application of skill which has been acquired by experience. Almost everybody can whistle a tune, write a rhyme, or draw a picture; but when through skill begot of experience the tune becomes a classic composition, the rhyme rounds out a poetic effusion, and the picture follows the lines of a masterpiece, art is born.

Continuing the argument, anybody can pass a parcel over the counter and receive money for it; some of us are so courteous that customers look us up when they want something in our line; others there are who can induce the customer to buy an additional article not asked for; but the real artist in selling is the one that goes out and seeks the prospect, putting over a deal that neither buyer nor seller had felt sure of consummating ten minutes previous to the close of the sale. That is the art of selling exemplified.

The average electragist has led himself to believe that the art of selling is not a necessary part of his accomplishments. If there is a building to be wired or a percolator to be purchased, he has a deep set notion that the customer will come to him.

He sees customers going into grocery stores without solicitation; but he has not carefully analyzed the situation—he has not realized that his wares are not recognized by the public as actual necessities. As a consequence, the electragist retail store usually gets only the patronage that is coming to it and nothing more.

It would be a wise and profitable plan for the electragist to study the tactics of the salesmen who solicit orders throughout the residential sections. They used to be called agents, or canvassers, or bell pullers, or some harsher names—but now they are called salesmen, and most of them are that, plus.

As a rule, the salesman who sells from house to house possesses all of the desirable qualifications of a first class business man. He is neat in his attire, polite, and obliging; he is well informed, sociable, and optimistic; he is keen, shrewd, and far seeing; and he could sell "hand me downs" to a tailor—if he tried.

This expert in the selling art might not be so successful behind the store counter, or at the electrical contractor's desk, but it is easy to believe that were he an electrical merchant the slack periods in his business would be few and far between. He would probably card index every prospect for electricity in his neighborhood; then when he found the opportunity he would make a personal call on the prospect, tell him about electric light and power, explain how electragizing saves time and annoyance and increases efficiency in the home and factory, illustrate how quickly and easily the wiring could be done, cite specific examples to back up his arguments, and then go away with an order to submit plans for the job.

Of course this is not as easy to do as it is to say it. But the art of salesmanship properly mastered, the rest of it is not difficult. It is not necessary for the modern electragist to join the house to house salesman's profession, but it is highly essential to the success of his business for him to learn the art of selling—to learn how it is done by these master salesmen.

And do not forget that this art cannot be learned by sitting around and watching somebody else do it, any more than the intricate details of house wiring can be learned while sitting on a coil of wire watching others do the job.

No salesman ever can be cocksure of success until he has had a long experience. Every sale renders him more proficient, and every lost sale spurs him on to improving his methods. He must not stop to mourn over his failures; on the other hand, every failure must add to his knowledge of how to succeed—so he loses no time in interviewing his next prospect.

Many electragists are in dire need of information on the art of selling. Originally they did not start out with any knowledge of salesmanship. They did not think that they needed to know how to sell. But the time has come when they must be real salesmen in order to carry out the plans mapped out for them. They must learn how to sell house wiring and lighting, as well as appliances, big and little. They must learn how to sell the electric idea to the public, and how to sell themselves as the logical ones to install and maintain electricity in the home, office and factory.

The progressive electrical contractor-dealer now has a new title—electragist. He must learn to use it properly. He has learned much in the past. He stands ready to continue his studies. Above all else he now must learn the art of selling. It is a man's size task, but its accomplishment will mean his permanent supremacy in the retail merchandising of electric installations, appliances, devices, and appurtenances.

Being Friendly

The successful business man, be he manufacturer, wholesaler, or retailer, makes it a point to know as many people as possible. Whether his line is groceries, building material, books, tomb stones, contracting, or electric appliances, he finds that it pays him to get acquainted with everybody that comes his way.

The head of a large business, who retired a few years ago with several millions of dollars to his credit, was asked what one thing stood out to him as contributing to his great success. Without stopping to analyze the question, he replied: "Being friendly with everybody."

One of the most difficult tasks in commercial life is to do business with a man that will not be friendly—one that will not acknowledge even a speaking acquaintance, or show at least a slight inclination to be sociable.

Of course there is the other side of it too. There is the loquacious salesman who often talks himself out of making the sale; and the garrulous clerk who would rather discuss the prize fight and the baseball scores than to make a sale of the shirt that the customer himself has decided he wants.

Then again there is the cranky, crusty customer that thinks there is a conspiracy afoot to rob him when the electrical contractor attempts to suggest chain pull sockets or an additional three way switch. Yet if he is properly approached and carefully handled he may eventually become friendly.

Some men like to be humored, and that which pleases them one day may displease them the next day. To do business with them one must cater to their whims. The opposite sex also possess this characteristic to a marked degree, and as women buy, or at least influence most of the buying of electrical goods, contractor-dealers should govern themselves accordingly.

Perhaps the best rule to follow is always to be friendly, but never overstep when the customer is not in the right mood. It was a wise philosopher who said that in order to be successful one should always keep his friendships in good repair.

Electricity on the Farm

Those who live in the city and have been brought up to enjoy the conveniences afforded by electricity, know little of life in the rural districts and the saving of time, annoyance, and labor brought about by the introduction of electricity on the farm.

Doing the chores by lantern light was one of the outdoor sports of the farmer of olden days—and anybody that has tried to tote a basketful of nubbins, a milk stool, a tin pail, and a flickering lantern out into the barnyard on a dark night, and then endeavor to open the pesky, sliding gate without unloading his burden, knows what an armful is.

Of course such performances always took place in the dark of the day—either after the regular day's work was done, or early in the morning while the city folks were still lingering with the prohibited stuff and ridiculing the man that invented sleep.

Three or four o'clock in the morning was the time the farmer usually arose and started in on his day's duties. The good wife had already started the kitchen fire under the pan of fat bacon, having previously beaten the pancake batter into a seething mass, and the children into wakefulness—all by the uncertain light of a kerosene lamp, or tallow candles.

Surely those were the dark ages, and the lowly farmer and his wife could scarcely hope for anything better. Suddenly there came an unseen force to free them from their slavery—electricity. With electric light, electric power, and

electric heat, they were at once emancipated. Perhaps it is not exaggerating to say that their work was cut in half.

Let us see. The farmer who has access to nearby service wires can enjoy all the luxuries afforded by electricity. The saving in time and labor comes through electric farm machinery such as pumps, grain grinders, wood saws, corn shellers, feed cutters, milking apparatus, and other agricultural implements; while in the farm kitchen and other rooms there are as many labor and time savers of farm household work, in addition to the appliances used in the city, such as electric cleaners, dish and clothes washers, sewing machines, ironers, and cooking utensils.

There is the electric light that saves work as well as worry in the farm home, the barn, and even in the cow shed and coal bin. Electric light saves time, annoyance, and labor. Electric power on the farm has been the means of shortening the days of the farmer and his workers, as well as increasing his net earnings. And now heat is being supplied to the farmer by the use of electric heaters, pads, and water heaters, while the electric range is saving the farmer's wife many hours of worry and drudgery every day.

No better arguments are needed for the electrifying fraternity than those cited in the foregoing in presenting his case to the farmer. The costs of adopting electricity to farm uses are not to be considered. The saving of money in actual time and labor are sufficient to induce any farmer to see the advantage of electrifying his premises.

Thoughtful electrifiers who have studied the situation say that specializing on farm light and power is a most profitable business. It would seem wise to look into this matter while building operations are being held up. The farmer is the world's food producer, and the demand for and consumption of food will never grow less. The farmer is the contractor-dealer's best prospect at the present time.

Through the regular employment of the telephone and the automobile in the farmer's business activities, he has become familiar with modern methods of doing business. He is no longer looked upon as an old fogey. He is becoming more and more susceptible to the adoption of labor and time saving equipment. It will pay the contractor-dealer to prove to him the advantages of employing practical electricians to do his electric installations.

W. H. Morton's Resignation

General Manager and Secretary-Treasurer of the National Association of Electrical Contractors and Dealers Will Put His Theories into Practice

Shortly after the middle of last month it was officially announced that W. H. Morton had resigned his official duties in connection with the National Association of Electrical Contractors and Dealers, to take effect the first of this month. His successor is announced by National Chairman James R. Strong in another column of this issue.

Since its inception twenty years ago Mr. Morton has been one of the active workers in the organization, and his resignation came as a complete surprise. While his many friends throughout the country of course wish him suc-

cess in his new undertaking, at the same time they express their sincere regret that he cannot continue in his official capacity.

Mr. Morton was the first secretary of the National Association and had held that office continually since 1901, except during the five year period—1913-1918—in which he devoted his personal attention to his Porto Rico interests. He resigned from office in the National Association in 1913 and removed to Porto Rico with his family, but returned in 1918 and resumed his official connection with the organization. He also was general manager of the Na-

tional Association and its official publication, and last year the office of treasurer was added to his regular duties.

During the many years that Mr. Morton has been so closely associated with the organization, he has earnestly worked for and with the membership to the end of improving the general conditions of the electrical contractor-dealer. Having become engaged in work in the industry during its early days, he was familiar with every phase of it, and through his official connection he endeavored to bring about changes for its betterment. Necessarily his efforts were largely confined to preach-

ing, while the practicing had to be delegated to others. His new connection doubtless came about through his desire to put his theories into practice personally.

The opportunity came through an old friend and fellow worker in the National Association, Gerry M. Sanborn of Indianapolis. It seems that these two cronies had often discussed the desirability of the furtherance of Mr. Morton's ideas, and only a few weeks ago Mr. Sanborn submitted to Mr. Morton a tentative proposition that caused the latter to sit up and take notice, as Mr. Sanborn expresses it. It had appeared to Mr. Morton that no inducement could be offered that would cause him to give up what to him seemed to be his life work; but here was such an attractive opportunity to engage in the practical end of his chosen field that it was entirely too tempting to turn down.

Both being conservative, the two men spent many long evenings in consultation, until it was at last decided that the deal should be consummated without further delay. Then it was that Mr. Morton resigned; his resignation was reluctantly acted upon—and accepted only because of the recognized advantages of his new connection; and now Mr. Morton has become an active official in Mr. Sanborn's established business enterprise.

The Sanborn Electric Company, 309-311 Illinois Street, Indianapolis, Indiana, is one of the solid institutions of the great midwest. Mr. Sanborn is the principal owner, and he has been engaged in business in the city of Indianapolis for the past thirty years. He has always been prominently identified with the National Association, having been its president from 1908 to 1910, and since 1902 he has been a member of the National Executive Committee from the Central Division.

Mr. Sanborn's company is engaged in both electrical contracting and merchandising. The dominant idea of the company is to be able to render complete service in electrify. An engineering department is maintained, and other departments are also completely equipped for efficiently carrying out the ideals of the organization. The company operates throughout the midwest and has installed the electrical work in a number of prominent buildings in such cities as St. Louis, Cincinnati, Louisville, Detroit, Cleveland and Buffalo.

Every detail of electrical work is ably handled by the Sanborn company

—not only the wiring installation, but the installation of machinery; after this is completed, fixtures are furnished by the modern lighting fixture department of the company; and when the building is thoroughly equipped, then the company's merchandise department is prepared to furnish supplies.

The Sanborn Electric Company occupies its own modern building, centrally located in the business district of Indianapolis. It is a three story fire proof structure, 32x195 feet in ground area, with foundations suitable for adding seven more stories. Of course it is hoped that this new alliance will result



W. H. Morton

in the need of the additional seven floors for the business requirements in a short time.

In addition to the general business offices, retail store, and fixture department, the company also maintains a workshop for building switch boards and special equipment; so when a job is in progress and something special is required for immediate installation, time and annoyance are avoided by handling it in this emergency shop.

Mr. Sanborn has brought Mr. Morton into this going and growing business enterprise in order to divide the responsibilities, and to afford the latter a chance to develop his ideas. Mr. Morton's official title in the new connection will be secretary and general manager. He has already removed his family from East Orange, N. J., where he has resided since his return from Porto Rico, to Indianapolis, where they will

reside, and Mr. Morton will follow in a few weeks.

National Chairman Strong Announces Mr. Morton's Successor

It is with regret that I announce to the membership the resignation of Mr. W. H. Morton Secretary-Treasurer of the National Association.

Mr. Morton is leaving us to become Secretary and General Manager of the Sanborn Electric Company, Indianapolis, and while I feel Mr. Morton's resignation as a personal loss and a serious loss for the association, I sympathize with his desire to re-establish himself in the electrical construction business and wish him every success in his new undertaking.

The National Executive Committee at its last meeting at Buffalo appointed a sub-committee with power to fill the vacancy in case Mr. Morton's resignation was offered (negotiations were pending at that time), and upon receipt of Mr. Morton's resignation the committee canvassed the subject and received among others an application from Mr. Farquison Johnson, our editor, for the position of Secretary-Treasurer.

The committee had given the matter careful consideration and after a full discussion has voted unanimously to accept Mr. Johnson's application, being fully convinced of his capabilities, great interest in the success of the association, and positive wish to carry on the association work along the lines laid down by Mr. Morton.

Mr. Johnson does not lack experience in managerial lines, although his activities have been largely devoted to publishing and printing interests. He was at one time the general manager and superintendent of a large printing establishment in Chicago, employing a hundred or more workmen; for five years he was publicity director and office manager of a prominent publishing company in New York City, afterward becoming sales manager; and during the world war he was employment director of a government explosives plant. Since 1919 Mr. Johnson has been a close associate of Mr. Morton at National Headquarters, and naturally has become familiar with the requirements of his new duties.

Mr. Johnson will assume his office on September first, and on his behalf I ask the earnest and hearty coöperation of the trade.

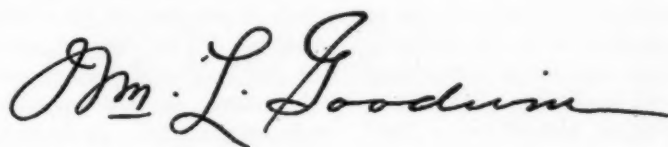
JAMES R. STRONG,
National Chairman.

W. L. GOODWIN
522 FIFTH AVE.
NEW YORK CITY

A PERSONAL MESSAGE.

Owing to the physical impossibility of my writing, personally, immediately, to all the officers and members of the National Association of Electrical Contractors and Dealers, I desire, through the columns of their own publication, to convey a message of thanks and appreciation to them individually and collectively for the wonderful expression of their respect, appreciation and friendship, and the beautiful form and manner in which it was conveyed to me at the Annual Convention in Buffalo, July 20th, 1921.

Words but feebly express my inmost feelings in this matter, and I can only say that in the future, as in the past, it will be my pleasure, as it is my desire, to continue to plan and work shoulder to shoulder with every one of you in the effort to up-build and make these branches of the electrical industry, in common with the others, models of industrial and commercial integrity, usefulness and service to all mankind.



What a Trade Organization Can Do and What Some Are Doing

BY CHARLES L. ESTEY

An Address Delivered at the Annual Convention at Buffalo, Thursday, July 21, 1921, by This Well Known Rotarian and Advertising Counsellor

You have assigned to me a subject that has great possibilities of development. It is a double subject—each having great possibilities of development. It is likely that in the time allotted to me we shall be able to consider only a few aspects of this double subject.

First: What a Trade Organization Can Do. Let me answer quickly. A trade organization can do no more than is done by each of its members. The successful organization is really only a big committee—a Committee of the Whole. And notice, please, the correct spelling of that word "Whole." I have known some committees that were always getting an organization in a hole simply because they would not function as a Committee of the Whole, or, in other words, the members, instead of pulling together and getting together, pulled apart and consequently got the bunch into a hole.

Did you ever hear of the man who made his wife return her new glasses to the oculist because he was afraid they would ruin her eyesight? He just knew they were wrong for her because he had tried them on himself and everything was blurred! That man is typical of some men who are appointed to committees.

This is one aspect of trade organization work that has great possibilities of development had we the time and the patience today to "go to it."

A trade organization, gentlemen, can do anything it sets out to do if the individual members will but see eye to eye, and work shoulder to shoulder. It takes everybody to know everything. Here and there we find a man who is proud to refer to himself as a "self made man" and unfortunately, most of these men worship their maker. Being self made they think only of self.

A trade organization composed of members who put *service* above *self* and who come to conventions to help as well as to get help, can work wonders in the industry it represents. There is no limitation to the good which such an organization can accomplish. Always there are a few big brained, open minded men who will get together and

in an open and frank way discuss their differences and misunderstandings, but generally they are in the minority. The majority, apparently, fail to comprehend how wonderfully it helps to talk things over; to let the sunshine of good will and fellowship and good intent illuminate the dark corners of cross purposes which inevitably develop with aloofness, hearsay and rumor.

Results of Getting Together

Getting together clears the air like a Spring shower. It breeds kindness, generosity and fairness. It promotes a consideration for the opinions of competitors; a forbearance and tolerance for real or fancied differences. These fancied differences disappear; real ones melt away. The crying need in America today is for members of all industries and trades to get together in earnest, helpful intercourse of ideas and experiences.

This great organization of electrical contractors and dealers has gotten away to a splendid start, and is going in the right direction. Of that there can be no doubt in the mind of any one who has kept in touch with trade organizations and what they are doing.

And yet in the case of your organization as in the case of every other, the chain of our influence and activities can be no stronger than its weakest link. Suppose, then, that each member of this great organization at this time set himself the task of answering the question which forms part of the subject of my remarks. "What can a trade organization do?" The obvious answer and the only answer to this question is, "My trade organization can do what I do as an individual member"—and we might add, "—it can do no more."

For each individual member represents an artery in this organization's system. According to the failure of each to transfuse his red blood to insure life and activity, just so much will its effectiveness fall short of success and dwarf the growth. The hand cannot say to the foot, "You do it". Nor can the head say to the hand, "It's your job". Neither can any member of the

body pass the buck to any other member and get away with it.

To be most successful and to enjoy the healthiest growth and largest prosperity, an organization must possess a developed mind as a Whole—big enough to control its units and to face and solve the problems with which it is constantly confronted.

Most of us take life too seriously. We give the impression to some of our friends that the weight of our responsibility is too great to bear. "The whole world is out of joint and woe is me that I was born to set it right."

True, there is need today for thoughtfulness. For the exercise of care and caution in every act of business. But there is no need, gentlemen, for any of us to go about this wonderful world with heads and spirits drooping, with backs bent and with faltering steps. The world today has need of cheerfulness in business; of optimism; of true unselfishness and true Service.

God forbid that your organization should harbor pessimism, regardless of present business conditions; regardless of difficult problems which must be met and solved. The world is ours, gentlemen. Life is ours. Opportunity is ours. Friendship is ours. Make a list of all your blessings and then a list of all discouraging things. Study these lists frankly and with sincerity. The blessings will so greatly outnumber the discouragements that we shall be ashamed of ourselves for ever giving voice to pessimism.

There is no real accomplishment without real pleasure in the achievement of it. Charles Schwab said in an address not long ago: "I believe in the aristocracy of men and women who do things—the aristocracy of accomplishment."

Get together and get to work. This is the spirit of modern organization. Not get together and fight. Not get together and quarrel. Not get together wholly for a good time. But get together and *work!*

This is the spirit of Success. You may have a splendid education, a wonderful mind, but the world wants signal

service. The vital thing with all of us is the transmutation of our knowledge, ability, and energy into Service. Our ultimate happiness and intellectual satisfaction rest upon the expression of ourselves in terms of the greatest usefulness to the world.

The key to successful organization activity is this: In every transaction, *everybody involved must profit.*

Selfishness never brought a man or an organization much real success. There can be no growth without service—exercise of the best we have. Elbert Hubbard, I think it was, said: "It is when we are green that we grow and when we think we are ripe, we are rotten."

Little service, little reward. Greater Service, greater reward. Business associations like yours are largely the result of recognizing this truth—that in union there is strength—and that a house divided against itself cannot stand.

Now very likely some of you gentlemen are saying to yourselves: "We didn't come here to be preached to"; or "This is all old stuff and we are tired of it. What we want is information."

But I feel sure that you will recognize in what I have thus far said, the answer to the first part of my subject, "What a Trade Organization can do." To boil it all down in a sentence then let me pass along this thought, which I hope each man individually will take home to himself:

My organization can do no more than I am willing to do and no more than I actually do in my capacity as a member of the great industry which it represents.

Organization must be governed by Right. When we are wrong we must be willing to acknowledge it and take our medicine like men, and in doses proportionate to our error.

If this organization is not going ahead at full speed it is probably because all its members are not functioning. And thus the speed is retarded.

After all, organization is only a state of mind. If you men have uppermost in your minds that this organization is going to be the leader among trade organizations, nothing can stop the accomplishment of it. But if you have doubts, if you are weak kneed, if you say "Let George do it," then the organization will lose its mind, and you know

what happens when men lose their minds.

It is evident that you have some live wires among you, else the current of life which is so evident here today would have failed to flow. In your organization as in all others, what is needed is not to complain of conditions but to improve them. True—business is competition, but good business is never robbery, and the spirit of modern trade organization is the spirit of getting together to air our differences in a brotherly friendship.

"I take no thought of my neighbors birth Nor the way he makes his prayer—I grant him a human's place on earth, If his game is on the square."

For the past few months it has been my privilege to serve the National Association of Stationers and Manufacturers as advertising counsel, and for the two years prior to that, to serve the United Typothetae in a similar though more intensive capacity.

Both of these remarkably successful organizations have reached their present standing in their respective industries through the practice of the very things I have been talking about today here.

In the printing industry particularly there existed for many years and in fact until the past very few years, a spirit of unfriendly rivalry, of suspicion, of unwillingness to coöperate, which kept the industry on a very low plane.

The same was true although not to so great a degree in the stationers' industry. There was a lack of the get together spirit, an aloofness that acted as a formidable barrier to progress. But with the advent of proper leadership in both these organizations and the introduction of a trade mark emblem and the coining of a code of ethics, conditions began to improve and they have been improving steadily ever since; so that today both the Typothetae and the Stationers' organization are at the peak of their success even though much remains to be done.

Obviously, the first thing undertaken in the Typothetae organization was the adoption of a definite positive standard method of ascertaining the costs of doing business.

Badly Diseased

The Typothetae, and very likely the Stationers also, found that there was an insidious disease at work in the industry which had been working for untold years. And this I understand is the

same disease which afflicts all Trades excepting of course the electrical. This disease is known as "anthrophobia" which means a fear of knowing the facts relating to the costs of doing business, including knowledge of cost of every item which enters into the cost of production. And many, many members of the printing industry took the attitude that they did not want to know their costs because they wanted to beat their competitors in some piece of business and did not want to check up the cost lest they might get cold feet when it came to quoting a price.

Of course this disease, as I have indicated, has never taken hold of the electrical industry, because, I understand, every man and firm knows the costs of doing business according to your standard cost finding system, and no one tries to underbid or undersell a competitor.

But with the advent of the Standard Cost System in the Typothetae and its adoption by the better grade of printers, the membership began to grow and things began to hum.

Two years ago, Joe Borden, who was the efficient general secretary of the Typothetae, and who did more, in my opinion, than any other one or a dozen men in the industry to get things going along right lines, undertook to make a check up in Dun's or Bradstreet's to see how printers stood who were using the Standard Cost System faithfully in their plants.

This check up revealed the interesting fact that 84% of those printers who made annual reports to the National Typothetae headquarters concerning their costs according to the Standard System were rated A No. 1—which is as good a rating as any bank in Buffalo or elsewhere. Only 14% were in the second grade, which is very fair, and only two percent were third grade. In other words there was no fourth grade, and every printer using the Standard Cost System was entitled to credit and confidence.

Mr. Borden also found in checking up mercantile reports that only 27% of the entire printing industry had a good rating and that 73% were utterly irresponsible and entitled to no credit whatever.

He found further, that only twelve years ago the printing industry stood away down in 80th place in all the industries as far as credit responsibility was concerned, while through the activities of the Typothetae organization

it had risen two years ago to 34th place.

The basic reason for this tremendous improvement in the printing industry is acknowledged to be the intensive work that has been done by the Typothetae. The organization had been going along for 34 years talking about what ought to be done and of course doing considerable good in a general way. But about five years ago a definite program of activities was undertaken which came to be known as the three year plan. However, the three year program was only a start and has now developed into a permanent program which has yielded very definite results.

Living Up to Slogan

The slogan of the Typothetae, "Standardization and Uniformity," is a good slogan for any trade organization to adopt. The three year plan comprehends the taking of a census and survey of the printing industry and ascertaining actual conditions existing in every city. The need for this census and survey was made evident to the Typothetae through a chart that was prepared representing 96 cities of the country in which printers had turned out printing jobs actually costing \$259,000,000. The printers had sold this printing at \$268,000,000, making a profit of nine million, only three and eight-tenths percent on the cost. This was truly a very bad showing and was conclusive evidence of the need of having a standard cost system.

To make a long story short, the Typothetae program plan has been in operation for a long enough period to prove its beneficial results. The Standard Cost Finding System in the first two years of the operation of this program, was put into more than 3,000 plants and these cost systems are being kept up every day to the great benefit of the individual printers and the industry in general. One hundred and thirty-five cities had been surveyed up to October of last year and local organizations formed in most of these cities, each local having a paid secretary and a uniform system of procedure.

The educational work of the Typothetae is notable. The Committee on Education has evolved several courses of study for printers that have been tested out by Harvard University in its business administration school and has received the approval of that institution.

There is now in operation among Typothetae locals, a Standard Accounting Course, a Standard Salesmanship

Course, a Standard Business Management Course, and a Standard Advertising Course, and these courses, I understand, have had a total enrollment of more than 8,000 students.

Thus it is evident that education is proving its practical value in the printing industry. It must be gratifying to the members of the National Association of Electrical Contractors and Dealers to know that this association is doing a very great work for its membership along similar lines and what the printing industry has accomplished should be of real encouragement to your own industry.

As a further indication of what the Typothetae has already done, permit me to quote from a letter received from one of the members in St. Louis showing the value of the Standard Program that was installed and is being maintained in that city. He wrote as follows:

"The industry in St. Louis was giving the customer practically two million dollars that rightfully belonged to the printer. As a result of this survey, practically all of the printers signed for the three year plan. We make them sign a legal binding contract that they are going to go through with the thing and that they cannot get out of it. Our company now pays to the local association, dues of approximately five thousand dollars a year, and we consider it the best money we have spent."

That is the testimony of one individual plant in St. Louis paying dues.

The service departments maintained at the Typothetae National Headquarters in Chicago are the department of Organization, which supervises all the field work and employs a large staff of field men; a Department of Research that collects and disseminates data for the members; a Department of Education that keeps the educational work active; a Department of Advertising that shows the printer how to advertise his own business and how to advertise the business of his customers; a Department of Industrial Relations that provides accurate information as to cost of living wages and labor conditions generally, not only in the printing industry, but in other industries; a department of specialized groups, and other departments, each of which is presided over by a skilled, trained executive working under the direction of the executive council of the Typothetae through a general secretary.

Regular courses of study and classes are maintained for training field men and local secretaries. The growth of

this work at the National Headquarters has been very rapid and emphasizes the awakening of the printing industry to its National and Local organizations.

It would be easy for me to go on and enumerate detail after detail of the great work being undertaken by the printing industry, but time does not permit.

In presenting the value of the organization to members and prospective members, a statement is clearly made that the dues do not cost the printer a penny because the dues paid to the locals and national organization are rightly a part of the cost of doing business and these costs according to the Standard Cost Finding System are all included in making up the bills to the customer.

Time was when the printer in this country was looked down upon as being an inferior business man. Today, through the activities of the Typothetae, the printing industry has risen to its rightful eminent position in the business world, and I know of no trade organization that renders so great a service to its members as does the United Typothetae of America.

Spirit That Wins

True service is the keynote of all this work. Unselfish coöperation with members everywhere. And this spirit is a spirit that wins in trade organizations. All together and always together for the good of the whole.

In my mind it is vastly more important that a member of a trade organization should attend the meetings regularly than that he should come down to his own place of business and open up his desk in the morning. An organization, and in fact any business, is like a wheelbarrow. You have got to push it to make it go. Gentlemen, what do you get out of your organization as individuals? You get out of it precisely in proportion as you put into it.

I am reminded of the story of the old colored deacon who came to the parson and said, "Parson, I don't believe the Lord answers prayer any more." And the parson replied, "What's the matter, brother?" The deacon answered: "I am just as hungry for chicken as I can be and I have been praying to the Lord—'Lord, Lord, give me some chicken', but the Lord don't seem to give me any, parson." And the person replies, "I don't think you prays right, brother. When I prays for chicken I say, 'Lord, Lord, please show me where the chickens am at and I does the rest.'"

Gentlemen, your trade organization has shown you and is daily showing you the opportunity for improvement. It is distinctly up to you whether or not you take advantage of the opportunity.

This matter of organizations is a mathematical one. When two men work separately with the same object in view, the value of their work may be stated as one plus one equals two; and when they work against each other it can be stated as one minus one equals zero. But when they work together it is one plus one squared, which equals four.

That is the true value of this coöperation through organization. It requires optimism and courage on the part of all of us to lift our industry above

the conditions which exist. The man who makes the biggest effort receives in the greatest abundance.

The Rule to Follow

This organization represents a field which is one of the greatest, if not the greatest in the world. There is one great rule by which we can profit, and that is the old rule, the good rule, the Golden Rule—"Do unto others as you would have others to do unto you." Not do unto them as your competitor has done unto you.

If we follow throughout our organization that Golden Rule, we shall soon find that nine-tenth of the things charged against competitors never happen; that ninety-nine percent of our troubles never had any actual signifi-

cance, and we will find the same rule followed through our lives that there will come to light the necessity for corrected interest which only corrective action can protect. We shall find by that same rule a commercial fraternity getting together for the greatest good to all and that those who do the most in the organization will enjoy the greatest success and prosperity.

In closing, may I earnestly recommend to you gentlemen engaged in this great and rapidly growing industry that you stand shoulder to shoulder to carry on and back up the constructive work of your officers and committees—and that when you have differences of opinion, it is well to get together as men and thresh out these differences in the spirit of the Golden Rule.

The Home Electric Idea

By O. H. CALDWELL

An Interesting Address Presented by the Editor of Electrical Merchandising at the Buffalo Anniversary Convention, July 22, 1921

The plan about which I shall speak to you this morning is one that has been worked out in a number of California cities, in Cleveland, Ohio, and in several other cities of the country. It involves a simple plan of coöperation with the real estate men—those who have houses to sell; and the beauty of the plan is that it can be put to work without costing members of the electrical industry more than a very small amount, the larger part of the expense being carried by the real estate people.

The plan as it has been worked out in California and in Cleveland, has been to have a committee of electrical men, for example, in your own town, get together your contractors' associations, your electrical leagues, or your electrical Clubs—whichever is the liveliest organization in the town—get in touch with the central station man, because he is part of the party; go to some live real estate concern that is putting up some new houses in one of the attractive sections of the town; and propose that the house be wired electrically, complete—wired as Mr. Luckiesh has suggested—as a house ought to be wired.

After the house is completely wired the plan has been to have it furnished attractively, and then it is thrown open for the inspection of the public for a period of from a week to a month or

longer, depending upon the size of the community.

The experience has been that thousands of people visit these houses under those conditions. Every lady in this audience knows how much fun it is to



O. H. Caldwell

tramp through a new house and see how everything is arranged. The practical demonstration of electrical wiring and appliances in such a house is far more interesting than a demonstration in a store, or in a display room.

Crowds of Visitors

For example, in Los Angeles nineteen thousand people inspected one Home Electric in sixteen days. In Sacra-

mento, a local real estate company had to rewire ten houses that it had sold, after the ten individual purchasers had seen the Home Electric. There were ten valuable wiring jobs right there for the local contractors. The same real estate company then started in on a program of three hundred fully wired houses. More work!

In San Francisco twenty thousand people visited the Home Electric. Following the demonstration of the Home Electric in Oakland, California, the builders of one hundred and fifty houses altered their plans to make them come up to the level of the original Home Electric.

The result of this Home Electric idea has been, then, that thousands of people inspect these houses who would not visit an ordinary real estate development proposition, or take any interest in it.

The Home Electric itself, in almost every instance, has been sold outright. In the case of the Cleveland house, the wiring of which Mr. Luckiesh designed, it was planned originally to sell it for \$25,000. As a result of the electrical wiring and arrangement of the lighting scheme in that house, which probably cost only a few hundred dollars, the builder was able to sell it for \$35,000. That confirms the experience that in every case every dollar spent on elec-

trical wiring and equipment increases the value of a house three or four times.

Houses Easily Sold

From the real estate man's point of view, houses will be sold by him on both sides of the Home Electric, and lots will be sold in the neighborhood, and you will be conferring a favor on your real estate man if you will take this idea to him.

Mr. Luckiesh, and some of the other men from Cleveland, will tell you that after they installed their first Home Electric, three thousand people visited it on the first day it was open, and during the month after it was opened, thirty-four thousand people were sold the electrical idea. As a result of that,

twenty real estate men have been besieging the electrical people of Cleveland to let them put on some Home Electric exhibits.

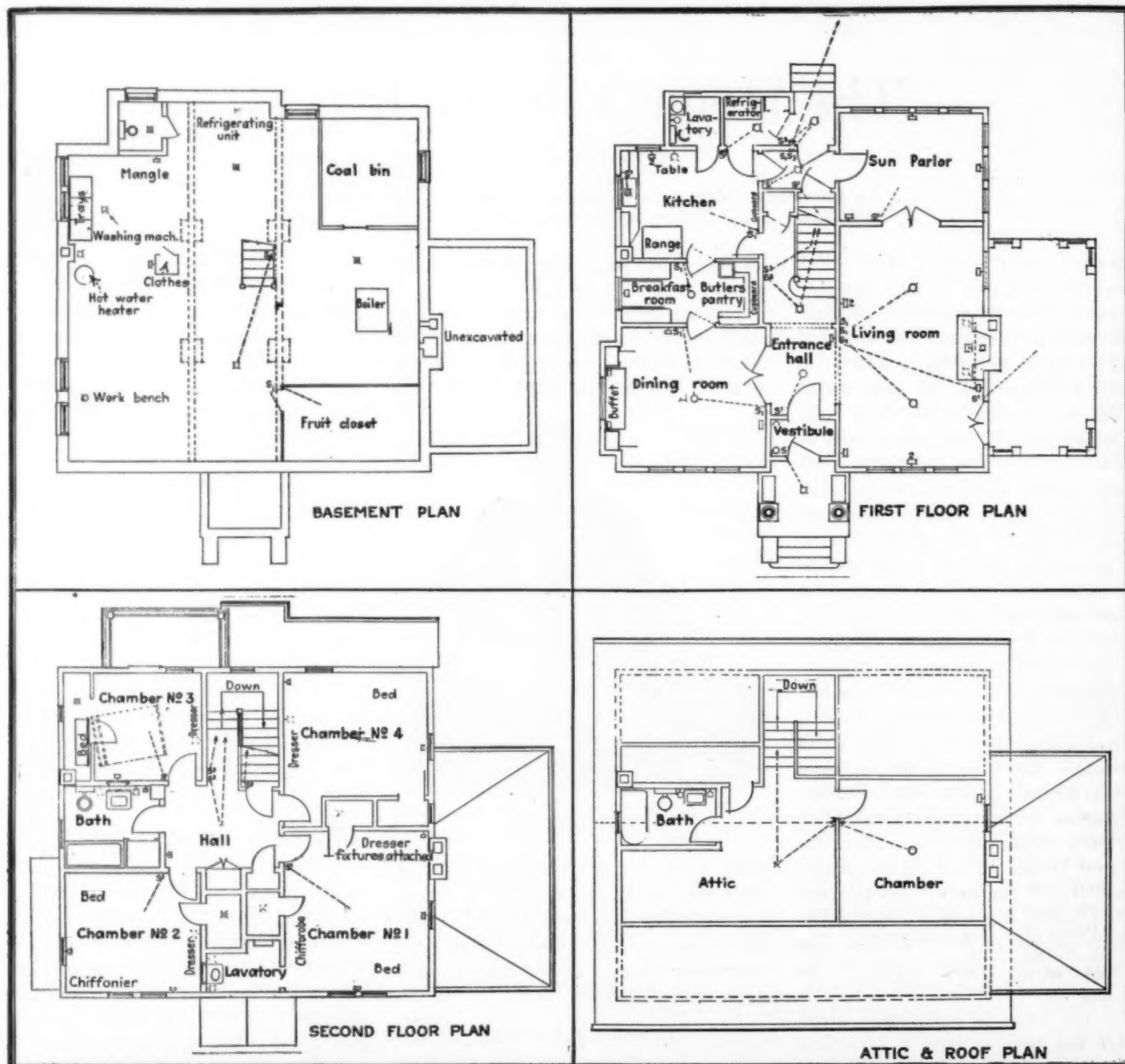
From the real estate man's point of view, the results are most gratifying. The Los Angeles house, which brought seventy-five thousand people out to visit it, sold for the real estate people a quarter of a million dollars' worth of building lots.

Now you can see how every man can go back and lay this matter before the real estate man in his community, and the real estate men can afford to spend all the money for the advertising. The Cleveland campaign was put over at an expense to the electrical people of \$600, while thousands of dollars were

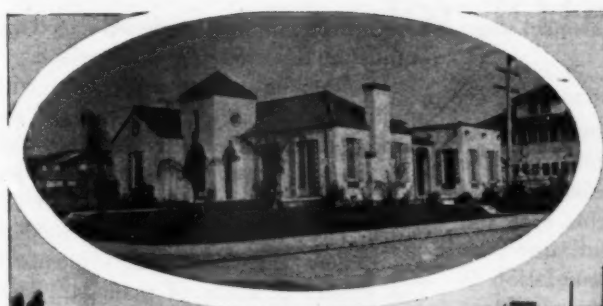
contributed by the real estate people.

I have here a letter from a real estate man in Los Angeles, in which he says; "From carefully watching the crowd and listening to the remarks, I have no hesitation in saying that the women, especially, were interested in the provision for the use of electrical appliances, and the lighting of the house. People of wealth and taste were loud in their expressions of interest. At one time there were one hundred and fifty automobiles parked in front of one Home Electric."

Think of it—of the seventy-five thousand people who tried to get in that Los Angeles Home Electric, only sixty thousand were able to get into the door! And of those hundred and fifty

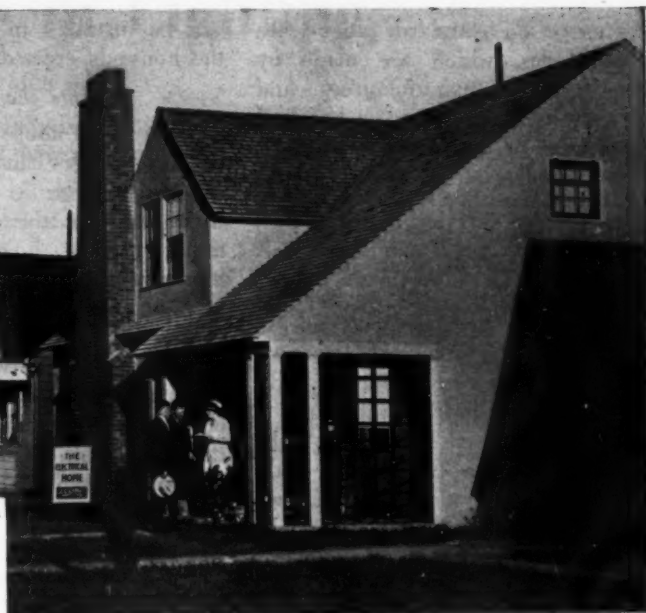


Through the courtesy of Mr. Caldwell we are enabled to illustrate his article with plates recently published in *Electrical Merchandising*. The plans shown above illustrate the possibilities of adequate wiring as set forth by M. Luckiesh of the Nela Research Bureau, who planned the wiring for the Cleveland Home Electric



In sixteen days, 19,000 people inspected the first electrical home in Los Angeles, shown in the oval.

In Sacramento, the local building company had to rewire ten houses in this one row after the purchasers had seen the home electric



automobiles, say a hundred of them cost four thousand dollars apiece—every one of the owners of those automobiles is a prospect for a valuable wiring job, no matter what the costs are today.

Idea Twenty Years Old

Mr. Coughlin of Worcester, who sat next to me in the audience here, told me that he has equipped his home with eighty switches, and that he has taken a number of people to see his house and has been applying the Home Electric idea for years. Mr. Coughlin says it was twenty years ago that this was done. Then we are just twenty years behind Mr. Coughlin now.

Any town of ten thousand population will support a Home Electric. In the little town of Lexington, Kentucky, having twenty thousand population, two Homes Electric were put over, and they are being planned in other cities

of similar size. But any place of ten thousand population is a good field for the Home Electric.

Now, when you have got the people into your Home Electric, you should have something about the wiring of the home to let them take away with them. Mr. Morton has very wisely provided this very attractive booklet, copies of which were handed to you when you registered, and he tells me that these booklets can be bought so that you can distribute them at a small expense to visitors when you put on your own Home Electric.

As to some of the ideas that we would like to see utilized in these Homes Electric—in the first place, let us have safety switches. Is it logical to carefully cover the circuit at all points except where the householder will touch it, and there put in a knife blade switch?

Then arrange the fuse box so that the

householder can put in a burned out fuse without doing it in the dark. Put a little shelf under the fuse board and put on it a card on which is printed instructions as to where each fuse is to go.

Put the sidewall receptacles down in the baseboard, but in the case of the kitchen and the pantry units, let us have them up either waist high or knee high, so that the woman can plug in with her cake baker, her egg beater, or any other electrical appliance, without leaning down.

Use Standardized Materials

Then let us install the standard plug—with parallel blades. There have been on the market at least thirty seven different types of plugs, and the result is that when you bought an appliance and brought it home it was liable to happen that you could not connect it with the outlet in your house.



In sixteen days, 20,000 people visited the electrical home in San Francisco, Shown at Left

In twenty-five days, 75,000 people inspected the Los Angeles adobe electrical home. On the last day alone, 6,900 people inspected the entire home



Let us agree on standard plugs with parallel blades, which are made by twelve competing manufacturers, and are already used on about two hundred different lines of appliances.

In the laundry let us have a special connection for the flat iron; and then let us have proper lighting provided for every washing machine sold. In my own house we had a washing machine down in the basement and my wife proposed that we add an extra room to the house for a laundry. By installing a two hundred watt lamp I was able to make that laundry as light as day. There are two and a half millions of washing machines out, and the statement has been made that probably a hundred thousand of them are in dark corners where it is hard to see how the work is progressing. That objection can be met if we go out and install a two hundred watt light over every washing machine.

Proper Place for Meter

And let us place the meter so that the meter reader can read it without coming inside of the house. In many cities and towns that is already done by placing the meter on the porch, so that it can be read without the reader entering the house. The ladies in the audience will recognize the inconvenience of having to answer the door bell, after dressing to go down to let in a stranger, once a month, and be subjected to all this inconvenience when the meter can be so located that it can be read from the outside. There are several meter reading boxes now made so that they

can be installed in the masonry when the house is erected.

Benefits the Contractor

In my own house I am arranging so that the meters can be read from the outside. There is one point in that which benefits the contractor. If the meter reading box is put into the masonry at the time the foundation is being laid, it means that the electrical contractor comes in on the job early in the progress of the work, before the appropriation has been depleted for other things and the contractor has to skimp the job. If you will sell your customers on the idea of outside reading meters, which can be installed at an extra cost not to exceed eighteen or twenty dollars, it is going to mean that the contractor will come in on the job while there is still money in the appropriation.

Then let us have all the dining room tables wired for appliances—percolators, toasters and the like. Those appliances will not be used unless there is wiring in the table for operating them.

Don't consider the kitchen complete unless you install an exhaust fan. Then consider the bathroom, and the proper installation of sockets, and outlets there.

No End of Useful Appliances

I prepared a list of some of the appliances which can be put into the modern house, and after we got through arranging this list, and seeing the number of devices which go into the living room, the dining room, and the bed

room, even an old hardened electrical enthusiast like myself was surprised.

The other day a man came to me with an appliance that he had put on the market, an electric dish washer which will contain three motors and will enable you to put all your dishes for the entire day's meals into the washer, where they will be properly cleansed. The washer is made of mahogany and teak wood, and is an ornament to the dining room.

Last week an enthusiast sent in the picture of an electric tooth brush, which has been developed. It consists of a motor driven shaft with a number of tooth brushes fitting on the end—one for Mary, one for John, one for Mother and one for Father. The plans in the little booklet are incomplete, because they don't include that contrivance.

The whole Home Electric idea, in which you can coöperate with your real estate men, and the jobbers, and all the electrical men in your community, is going to sell the electrical idea right in your own home town. I hope that every man here will go back to his home town, and if it has over ten thousand population, get in touch with a live real estate man and arrange to put on a Home Electric.

Beloved Boosters

The world loves a booster because he increases the world's wealth. When he boosts his own wares, he also boosts the steady, certain progress of the age. People like him and trade with him and go back to him again and again.



After the demonstration of this home electric in Oakland last September the builders of more than 150 houses altered their plans to conform to the wiring of the demonstrated home

Color Effects in Lighting

BY BEATRICE IRWIN

An Address Delivered at the Anniversary Convention in Buffalo,
in Which is Treated the Science, Art, and Business of Illumination

In many respects the convention resembles the clan gathering which in olden days was for two purposes—counsels of war, and feasts of conquests. But in this wonderful Electric Age we are struggling towards a point of illumination at which war will be an impossibility, because the narrow cruelty that underlies the word "conquest," will have been burned out of our consciousness by the radiance of a broader principle and a bigger word; that word is "coöperation."

We can rejoice in the unlimited possibilities of our advancing age, and though conventions are modern prototypes of the clan gatherings, yet they resemble them only in their best aspect; namely, that of united opinion and united endeavor. For surely the convention is nothing if it is not a meeting of minds for the purpose of erecting new milestones on the path of progress. A call to a convention is therefore an honor and a great privilege, and one for which this speaker is both happy and grateful.

However, before speaking on the New Science of Color and its application to illumination, I should like to express a hearty appreciation of the instructive and interesting papers already read. Mr. Goodwin has turned a new and far reaching searchlight for us upon the problem of "Capitalizing our opportunities," and it is my hope to profit by his advice in the brief moments that we now have together.

If you will lend me your most critical eyes combined with unprejudiced ears, we shall come to an understanding that should not only tend to advance our mutual interests, but more important still, should contribute a new aim and essential to the Science, Art and Business of Illumination. That aim is a detailed, discriminating and scientific application of Color to Illumination.

Demand for Color

There are several reasons why this new essential in illumination is being increasingly craved by the public, and the chief reason is self protective reaction against glare and direct lighting. Color supplies an antidote to this condition, but owing to the ignorance and

exaggeration with which it is applied, it often creates evils worse than those it seeks to remedy.

Now a definite and balanced use of color cannot be brought about by a specialist's invention, by an engineer's knowledge, nor by the contractor-dealer's business experience; but it can and should be brought about by the united effort of these three operators of successful illumination. Hitherto, efficiency and fixture have been the two main issues of development in illumination—but if color increases efficiency and inspires new and better fixtures, why should we not add a scientific application of color as a third and profitable essential to the Science, Art and Business of Illumination?

Efficiency and fixture have had such a good start, and have brought so much skill and labor to bear upon the perfecting of practical and ornamental devices, that color will have to work hard to make up on them, and can only hope to do so if they, like good coöperators, will lend a helping hand, receiving in exchange knowledge which can extend the applications of illumination into new and profitable channels.

Filter illumination, which was presented at the Fixture Market here in February, and which now returns to you under the name of Nuralite—derived from a Persian word "Nur" which means light, is based on the psycho-physiologic color chart contained in my book "The New Science of Color." This chart was the result of extended experiments as to the affective power of color in relation to preservation of eyesight, increase of nervous energy, and general human development.

I wish there were time to tell you more about the laboratory side of this work, and also of many permanent cures of eyestrain, nervous insomnia, and other conditions, that through the agency of filter lighting have proved the theories of color science conclusively, practically, yet leaving me filled with eager enquiry for further knowledge of this vast fountain of force.

Using Finer Forces

Man has classified and utilized all the coarser forces and phenomena of

nature, such as wood, metal and stone, but in the future, this age will probably be distinguished by its discovery and use of finer forces which conduce to the liberation of finer forces in man, and of these liberating forces color is one. For this reason alone we should hasten to apply color scientifically to illumination, and to recognize the fact that balanced structures of radiant color are as important to us in our homes and public buildings as good ventilation and harmonious proportions. In short we should begin to consider radiant color as a new form of nutrition.

The first aim of Nuralite is to present such balanced structures of radiant color as will prove through a series of simple and efficient lighting devices the hitherto unsuspected benefits to be derived from a psycho-physiologic use of the entire solar spectrum. Nuralite presents color of determined values, in prescribed proportions, designed to achieve definite results, either in general or special illumination problems; therefore the filter might be classified as a color prescription.

We should never forget that *color affects* underlie color effects, and that a knowledge of the former is essential to the most profitable use of the latter.

Not Properly Chosen

Shortly after the publication of "The New Science of Color," one of New York's foremost interior decorators said to me: "This book explains something that was often a puzzle; namely, that some of my most beautiful color effects proved least satisfying to my clients. I selected color schemes agreeable to myself, and probably ill adapted to the nervous temperament of my clients, and certainly without knowledge of the intrinsic power of the colors chosen or their vibratory relation to form."

This quotation brings me to a point important to us all, the consideration of form in relation to radiant color and fixture. If fixture is to achieve a real unity with radiant color, which is in itself so full of vibration, it should be as simple and flowing in line as possible. For this reason, the eleven models that constitute the filter system of Nuralite are designed with an un-

compromising simplicity that unites them in a just proportion to the amount of radiant color that they carry, and leaves them free to fit into any style of room or building, because they embody something that is more universal than historical periods, they embody natural principles of light and color in definite relation to human welfare.

These principles are classified in my chart as *Sedative*, *Recuperative* and *Stimulant*, according to the total vibratory value of the color and its affect as contained in the filter, which is appropriately keyed to the needs of both room and individual.

Three years' service in the adjustment of various installations, and unusual health and decorative problems, has resulted in the possibility of a general standardization of color combinations desirable for different types of illumination. Overhead filters are designed to create diffusion of light with delicate color values in blues, golds, orange and rose. Portable filters are designed to create a concentration of light with stronger color values in rose, orange, greens, golds and violet.

I hope that anyone who is sufficiently interested will make closer test of the few models that I am about to demonstrate to you.

No Limit to Variety

Before demonstrating, however, let me quote a fragment from the "New

Science of Color," and also revert briefly to the problem of fixtures. Though, up to date, Nuralite has only developed eleven models, there is no reason to limit the style and variety of fixtures that can appropriately contain radiant color. Doubtless much that is available could be utilized, and better still, Nuralite should stimulate new designs in fixture, more delicate perhaps in treatment, and more in keeping with the slender elegance that characterized modern decoration, and is, I believe, a characteristic reflex of our splendid age of elimination, speed and nervous energy.

So I am relying on fixture designers to advise and cooperate further on this point. I have come here hoping to receive your suggestions on this subject and on any others which can contribute to our mutual cooperation and benefit.

I select a few paragraphs from the "New Science of Color," which contain some practical generalizations on the *qualities* of color desirable for use in various types of rooms. It is always important to remember that it is not so much the color as the *quality* of the color that conditions its affective value in our surroundings.

The use of indirect and shaded lighting has gone far to remedy the fatiguing effect of direct masses or spots of light; but Color Science will enable us to evolve a luminous system that will not only be more decorative in character, but one that will cooperate more intimately and efficiently with our environments, and

free them to a great extent of their present monotony.

It is an unnatural condition that man, whose organism is mobile and iridescent, should dwell in a fixity of any one form or color.

For most of us, the cost of constant re-decoration is prohibitive, but through a knowledge of Color Science, and the application of its principles to illumination, we shall obviate much of the monotony that causes depression.

Halls and entrances, instead of being sombre, should radiate recuperative or stimulant colors. Sedative or recuperative tints are most suitable for dining-rooms, stimulant colors for reception rooms, and recuperative and sedative schemes for bedrooms. The most important point to observe, however, is that every surrounding should meet the individual requirements of the person who owns it.

If we come to think of it, color is the ultimate signature of vibration, the initial impetus of all energy. Take one example—mental, which in its final fusion is known by the color of its flame. Why, therefore, should we not consider color dynamically, as a creative force, instead of as a mere decorative detail, as an essential rather than an adjunct of illumination?

The flame of Color Science is a diamond flame, uniting all the rays of the spectrum in its service, eager for the union which animates progress, and a flame which hopes to merge color, efficiency and fixture—the Art, the Science and the Business of Illumination into one kindred and cooperative whole.

Six Essentials to Business Success: V

BY J. E. BULLARD

Have a Definite Objective and Don't Guess on What You Might Accomplish, But Gain Success Through Determination to Win

Doing business with the sole end in view of making as much money as possible all too often results in making little money or even in complete failure. It is a good deal like an army making a greater effort to keep close to the kitchens than by gaining territory from the enemy. There is always danger that the enemy will capture kitchens and food supply and leave the army with nothing. On the other hand, the harder the army strives to gain objectives, to capture ground from the enemy, the safer it is making its kitchens and food supply.

There are two kinds of objectives, the ultimate kind and the immediate kind. To illustrate: When the Germans were making their drives their ulti-

mate objective was Paris but each day the armies had as objectives a certain number of kilometers ahead. A given distance was laid out to gain and a given number of days allowed in which to gain it. As long as these immediate objectives were gained they were making progress towards the ultimate objective. In the same way, when the allied armies were making their drives their ultimate objective was Berlin and their immediate objectives were the given number of kilometers to be gained.

The ultimate objective of the business man is to accomplish some object that is expressed in his business policy. It is to excel in some certain way. This naturally means a very much

increased business, for excellence always results in recognition and increased demand in that particular field where the excellence exists.

The immediate objectives are the things that must be done from day to day, week to week, month to month, year to year, in order to advance towards that ultimate objective. They are the quotas and are usually measured in volume of business because this is the simplest and the easiest standard to use. It, however, is highly important that the business policy, the ultimate objective, always be kept in mind and that the volume of business is not gained at too great a cost.

It sometimes happens that a concern prides itself upon satisfying customers.

It aims to have everyone of its customers satisfied. At the same time certain quotas are set for the different months in the year. In the effort to make these quotas, old customers are neglected and the new ones are not given the attention necessary to assure satisfaction. The volume of business done during the month may indicate that the quota has actually been made. A little analyzing of methods and results, however, shows that in reality it has not been made. At the end of the quota period the concern is further from its ultimate quota than it was at the beginning. It is getting further away from satisfying all customers. A smaller volume of business and a larger percentage of satisfied customers would have proved more profitable in the end.

Keeping Track of Quotas

In this case it was not merely a given volume of business that needed to be considered but rather this volume of business without displeasing customers. In the final records it is necessary to figure the percentage of satisfaction as well as the actual sales. More than one concern has actually paid salesmen to hurt their business. It has appeared that these men were profitable. They have secured a great deal of business but it eventually develops that these men have used methods that have resulted in the dissatisfaction of the customers. They have really been a liability rather than an asset.

It is necessary to watch the repeat purchases from the customers and the sales made to their friends as well as the actual volume of sales. If too large a percentage of customers don't come back and make further purchases or if they never send in their friends then it is time to discover the reason. The objective set is not really being gained. The distance covered has been great enough perhaps but the direction has been wrong.

In principle it is much the same as in the case of an attacking army. That army must not only go a certain distance but must go in a certain direction. If care was not taken to maintain the direction it might happen that instead of going in a straight line it might go in a curve and when it had covered the distance be behind instead of ahead of its former position. So if a business quota is measured in volume of business it is just as necessary to watch the method by means of which it is attained as the actual volume itself. Whether or not the volume increases as

rapidly as desired it is desirable to make certain that it is secured in such a way as to keep all of the customers entirely satisfied.

Greater Accomplishment

Just because an army that is forcing back an enemy through the woods may get lost and go on in the wrong direction if precaution is not taken to keep the direction straight, however, is no argument against that army attempting to gain a certain objective. It merely means that it is highly important to use every precaution to keep in the right direction. In the same way the fact that setting a certain quota in terms of volume of business to be done over a certain period may lead to practices that will eventually hurt the business is no argument against the quota system. It merely emphasizes the fact that the method of getting the business as well as the total business secured should be considered when compiling records.

An objective or a quota always means greater accomplishment. A man who sets out to do a certain amount of business during the coming year will surely do more than he otherwise would even though he does not accomplish all that he sets out to do. With something definite to work for one can do a great deal more work than is ever possible if some definite task is not set. The desire for accomplishment, however, must not be so great as to blind one to the method of accomplishment.

The sales force that sets out to sell a certain amount during any one month will sell more than it would without this determination to sell that amount. The sales force, however, must not have its determination so firm that it will neglect the pleasing of present and new customers in the attempt to make its quota. Nearly all the trouble that has resulted from the quota system is that distance alone has been measured and no account has been taken of direction. As a result the concern one day awakes to the act that though it has been covering a lot of distance it has actually been going backward instead of forward.

Definite Planning

An objective presupposes that definite and careful planning has been done to go a certain distance in a certain direction and that everything has been arranged for doing this. If this is actually the case the results are going to be much more satisfactory than would have been the case if less thought and

planning had been given to the subject. Also if care is used to see that all plans are carried out as planned the profits of the business are safeguarded.

It is said that when the Ford Motor Company had finally developed a really practical automobile and was in a position to manufacture on a commercial basis, the question of policy came up. The question was one of making the most luxurious car, one which only the rich could buy or of making that car which would be satisfactory in service and at the same time be within the reach of the largest possible number of people.

It decided upon the second course. It made its ultimate objective the placing into the hands of the largest possible number of people a satisfactory automobile. Each year it has worked towards this objective by planning to sell cars to a certain number of people. At the same time, however, it has not lost sight of the fact, that the quality of the car cannot be reduced below a certain point in order to sell it at a lower price, if the ultimate objective is to be gained. In other words it has watched the direction as well as the actual distance.

Base Quotas on Facts

It is a mistake to base quotas entirely on guess or desire. A man may think that he ought to make a certain amount of business, that his sales force ought to make a certain record, and still be very far from the facts. He may desire certain results that are either very much beyond or very far below the range of possibility.

Setting a sales quota for the sales force that is too low is likely to be demoralizing. The sales force knows that the remuneration is based upon the quota. Every man and woman on that force may know that he or she can exceed that quota to a very considerable extent. Do they do it? The chances are that they will not. They have no desire of having their commissions reduced. They prefer to loaf part of the time, or to employ part of their time at other work than to bring in sales that are very much in excess of the quota.

On the other hand it may happen that it is not possible to make the quota. In that case the sales people become discouraged and leave. To be effective the quota must be based upon known facts. The general who sets an objective if he is wise learns all he can about the conditions before setting that objective. He knows in advance just

about what the chances are of gaining it.

In the same way, the wise business man will know all the facts before setting a quota. He won't merely guess or express a desire. If he is selling washing machines he will find out what he can about the number of houses in the territory that are wired, the number of people already owning washing machines, the servant problem, and the incomes of the consumers of electricity. After he has done this he not only has a pretty good idea about how many machines can be sold but under what plan they will have to be sold in order to sell the maximum number.

Don't Guess on Opportunities

Any dealer by going to a little trouble can find out how large his business should be, how great are the opportunities for growth. When he knows these things, he can plan more intelligently and he can base all his quotas or objectives upon actual fact. It is just as necessary to take fairly frequent inventories of the opportunities of the business as it is to take inventories of the stock and fixtures or to keep a record of the cash.

Keep as close a record as possible of the number of houses that are being

wired and the amount of business that is being done. Also find out how great the buying ability of the electricity users really is. Through the central station, the coöperation of the dealers and contractors themselves, inspection records and the like, it is possible to secure all this data. The possession of it means doing business on a fact foundation rather than a guess foundation.

Sometimes facts may be readily learned that will have a very decided bearing upon what should be made the real objective. In one of our large cities a dealer made a little investigation. He discovered that there was scarcely a concern that was not paying far more attention to volume of sales than to satisfying customers. He decided to satisfy each and every customer. He placed actual volume of sales second. He made all his plans on the basis of satisfying the person who purchased from him rather than upon persuading that person to make a purchase.

This Fact Objective Paid

At first he found it very hard to live up to this policy. The temptation to make a sale regardless of whether or not the customer could be satisfied was

very great. However, he resisted this temptation and never lost sight of the value of satisfaction. The records that he kept showed him that the policy was paying. The person who made a purchase never failed to send some new prospective purchaser around. Sometimes this purchaser would even come with the prospect.

One of his customers suddenly came into possession of a large fortune and decided to build a mansion on a large estate. Bids were asked for on everything that went into that house with the exception of the electrical appliances and supplies this dealer sold. The customer instructed those in charge of the purchasing to buy all these things from this dealer. The total sales in this case were very high. It would have been hardly possible to have secured all the business he did had it been necessary to bid against others. Because of the fact, however, that he had in this case gained the objective of thoroughly satisfying his customers he did not have to meet any competition. The business was just given to him.

Volume of business, therefore, is not always the thing to give first consideration. Sometimes, when the facts are learned it will be found that service is of even greater importance.

Advertising: Its Use by and Advantage to the Electrical Contractor-Dealer

BY A. A. GRAY

An Address Delivered at Outing of New Jersey State Association at Asbury Park, July 30, by Chicago Advertising Counsellor

When we cast about to fit a title to its subject matter, or reversing the process, fit the subject matter to the title, we realize that primarily the subject matter is the thing; that the title is, or should be, incidental.

However, when once we have hit upon a pleasant sounding, mouth filling, ear tickling title we are loath to give it up. Consequently we cudgle our brains to develop an opening at least that will justify the use of this particular title, even though we sacrifice brevity and perhaps fall short on wit.

Logically, we should put it this way: "Why Should the Electrical Contractor-Dealer Advertise?" or "The Electrical Contractor-Dealer Should Advertise," it being noted that there is a more or less indication, subtly, that the future tense

must inevitably manifest itself. This because, while as a matter of fact the electrical contractor-dealer does advertise and has done a good deal of advertising, he does it and has apparently done it—"not noticeably."

No matter what may be the merits of the case, it appears to be the pretty generally held opinion that the electrical contractor-dealer does not advertise enough. Furthermore, that when some generous corporation literally deluges him or deluges him literally with a lot of first class, high grade advertising material, sufficient to paper the town, he doesn't even curtain the walls of his mind with it, but first lines the waste paper basket and then send it on its way to the macerator, undoubtedly hoping that in its reincarnation it may find him

or some one else able and willing to use it properly.

Out of which it may be deduced that there is prevalent an idea that the electrical contractor-dealer either doesn't want to or isn't able to do a good advertising job for himself or let some one else help him do it or do it for him.

But, why should the electrical contractor-dealer advertise? Right here, in case I do not get much further, may I not interject the answer as I see it?

The electrical contractor-dealer should advertise because there are too many of him to supply the needs and wants of those who would naturally and of their own free will come to him if left to their own devices and choosing as to whether they wanted what he has to part with

instead of a player piano, a flivver or music box—"buy our deluxe assortment of dazzling dollar didoes and we put one in the house, everything confidential, no investigation of previous credit record, etc."

He should advertise because every one else who wants to get the loose change or the hoard that ought to go into loom and conduit and outlets and appliances to make life more worth the living is advertising to stimulate a passion for the possession of the less useful but more exhilarating impedimenta that have their day and perish long before the last installment is paid and "Never again" is bracketed around the experience.

The electrical contractor-dealer is in a business that competes with other business for the attention of people with desires and the ability, potential or active, to satisfy those desires. He is not ordained, of God or man, to be a thing apart from other useful commercial enterprises. He must do and be as others.

Business consists of making something or doing something that can be used by so many other people that the people making it or doing it can make a living out of it and have something left over to buy what the other people are making.

Salesmanship consists of discovering the people who can use what some one else is making and convincing the first mentioned people that it is to their advantage to use one particular kind or quality of a thing to the exclusion of any other.

Advertising consists of telling the greatest number of times, in the shortest time, with the least expenditure of money, to the greatest number of people who can use a thing, the fact that the thing is available and it is to their particular advantage to have it or use it.

Advertising picks out from the mass of people *we* think are logical users of our product those who think *they* are. Salesmanship removes the doubt, confirms the wisdom of their judgment—converts them from prospects into customers.

Advertising started out to be a modest, uninspired, unimpressive aid to business; plain, austere and almost commonplace. At the beginning it consisted of chaste announcements or advertisements to certain things in a public way, always dignified in tone and bearing invariably the formula that it dealt only in whatsoever things are true.

Later on advertising became the tool

of the charlatan, the pitfall of the gullible, the credulous and the unwary. But not for long. Hard headed students of business, recognizing in advertising, if properly directed, a whetsone for ambition, aroused popular opinion to the danger that was present when unscrupulous men were permitted to employ this force unrestrictedly, and soon legislation and standards of practice barred them from legitimate mediums of publicity.

I sometimes wonder if it often occurs to even students of advertising that this crisis through which advertising passed and emerged triumphantly was the most auspicious endorsement of its utility that any vocation or business could possibly have had. Essentially, it was conceded that here was an agency which molded the buying habits of the people, who were utterly dependent upon the truth or falsity of the claims set forth as to whether they might be wise or extremely foolish in their expenditures.

As advertising grew in volume, advertising mediums grew in number, and methods and expedients developed in boldness, cleverness and effectiveness. Today the contest for the attention of the public knows no bounds, and it is in this medley of lures, this maelstrom of siren appeals, that the electrical industry lifts up its voice and attempts to be heard with its "me too," or rather, "I also."

Fortunately for the industry, its novelty, its incomprehensiveness, its mystery and its romance have attracted world wide attention to things electrical. Its attractiveness as a subject of conversation, its startling features and its manifest advantages have given it a volume of gratuitous advertising that has not been vouchsafed to any other phenomena that has become a part of current or contemporaneous development.

But aside from all this gratuitous advertising, the industry—some opinions to the contrary—has not been niggardly in its advertising expenditures, has not been unintelligent in its propaganda, nor has it been lacking in vision and boldness.

And furthermore, I will say this for it: I do not know of any other industry where there has been so much thought and expenditure of effort and money on the thing itself, upon the medium of utilization, as there has been and is in the electrical industry. Always, throughout the development of the industry, those devoted to the industry and in a large measure respon-

sible for the vast gains it has made have put to the front electricity and the service that grows out of its use rather than the equipment and accessories utilized in this service. And in the benefits accruing from this institutional advertising of electricity every element in the industry has participated.

We have, then, a mighty solid background against which to project our study of advertising as it relates to the electrical contractor-dealer.

We find upon the part of the central stations generating electrical energy for lighting and power an acceptance of the tremendous value of advertising and a generous use in every part of the country of advertising as a business force.

We find upon the part of manufacturers of electrical apparatus and supplies an acceptance of the tremendous value of advertising and a very generous, even an extravagant use in every part of the country and in mediums of every kind of advertising as a business force.

We find the electrical supply jobbers of the country, for the most part, vying with manufacturers to make these advertising expenditures effective. We find them extending a helping hand in terms of counsel and cash expenditures to assist the contractor and dealer to appeal successfully to the public. A study made within the last five weeks in connection with the preparation of this paper has revealed the electrical supply jobber equipped with sales promotion and advertising departments at the command of the contractor and the dealer and underwriting expenditures for the upkeep of these departments and the material supplied by these departments ranging from \$10,000 to \$100,000 during the current year.

Now just pause and consider for a minute. If the manufacturer and the jobber, doing business in a comparatively restricted circle and selling relatively only a limited number of items to a buyer for whose attention there is comparatively little competition, finds it tremendously necessary to employ advertising generously and intelligently, how much more necessary is it for the electrical contractor-dealer, the point of contact with the general public, for whose attention the greatest competition the world has ever known is waging, to use advertising generously and intelligently, to win its share of every dollar spent by the public and thus survive in the service of the public?

Furthermore, considering the electri-

cal contractor and dealer as a strictly legitimate channel through which electrical supplies and appliances should flow to the consuming public, how long or how effectively can he maintain this position if he does not advertise and build up his volume of business in face of the fact that the demand for merchandisable goods of an electrical nature is continually developing standardizing and packaging of products, making them easy to stock and vend, and this very condition is tending to build up other merchandizing outlets all around the contractor and dealer, bidding for his business and taking the bread out of his mouth.

During the last six months I have had occasion to appear before the sub-committee of the committee on gas, oil and electric light of the Council of the City of Chicago in connection with an ordinance seeking to regulate and control the installation and use of electrical equipment and licensing retailers of electrical supplies and appliances.

For the most part the electrical interests of the city were concerned with the technical phases of the ordinance as it related to regulation and control and the matter of licensing the retailer with its attendant fees was passed over with little protest, for the legitimate contractors and dealers were not opposed to the conditions, which put a premium on business integrity and technical intelligence. Furthermore, there were comparatively few legitimate retailers interested, anyway. But did it stop there? It did not. At one of the stormiest hearings, a hearing which indeed demonstrated the futility of trying to pass the ordinance at the present session, it was made plain that the associated retail interests of the City of Chicago were opposed to any licensing of retailers of electrical supplies and appliances and they arose en masse and said so. And upon the spokesman of these interests being called upon to state definitely the name and character of the retailers or stores he represented he announced scores of department stores, hardware stores, house furnishing stores, drug stores, florists and undertakers, but not one with whom the electrical men present were familiar as representative retailers of electrical goods.

These other stores are keen for electrical supplies and particularly electrical appliances. They are keen for these things because they know that generous advertising has built up a desire for these things and they have had experience enough with other lines of mer-

chandise to have faith in their selling ability, coupled with judicious advertising, to stock the goods and seek the trade for them.

I know that there is a lot of weakness in the business. I know that lack of capital is a handicap in many places. I know that many a good wireman is making a mighty poor merchandiser. But I hold to the opinion that by and large there is as much intelligence and courage among electrical contractor-dealers as there is among any other class of aspiring and ambitious business men. And I have seen just as much salesmanship and sometimes better service in the store of an electrical contractor-dealer than I have found in the most ornate and highly successful electric shop in the country. I want to go on record now and say that if the man who has the intelligence to work out an electrical installation cannot cultivate all the ability needed to work out a successful electrical store he can hire the ability without difficulty and without going broke paying for it.

I firmly believe that it is not so much a lack of ability as it is a bull-headed disbelief in one's own ability; in an infinite capacity for giving some one else credit for greater ability, and fundamentally, inexperience in advertising and selling, which results in skepticism and unbelief. The electrical contractor and dealer is not sold on advertising; he is not sold on selling; he is not sold on himself. Where he is, he is successful, and there are shining examples all over the country that demonstrate incontrovertibly that this is true.

Where the contractor or dealer has made a conscious and persistent effort to coöperate with the manufacturer and the electrical supply jobber to carry out an advertising and selling campaign the results have invariably been successful and satisfactory. Where he has had the resources and courage to go it alone he has been eminently successful.

In most cases, however, it has been team work that has been the most successful. At least it has been team work that has pointed the way and revealed the experience that has led to successful individual effort. Coöperation of manufacturer, jobber and dealer has made it possible for the dealers in certain sections to pool their resources and advertise collectively, utilizing dominant space in local newspapers, and possibly billboards and street cars at an expense well within the aggregate means of all, but which would have been prohibitive in the case of the individual.

In other cases the electrical supply jobber has divided the expense with the dealer for special advertising campaigns and in many cases the jobber has borne the entire expense or as sometimes happens has passed on to the dealer any assistance which he, the jobber, has received from the manufacturer.

In any case, there has not been any lack of helpfulness upon the part of both the manufacturer and jobber. Coöperation in good measure and overflowing has been available. The trouble has been that the contractor and dealer either would not or could not avail himself of it. Literally hundreds of thousands of dollars' worth of the finest advertising material has been prepared for the assistance of the dealer by both the manufacturer and jobber, but much of its usefulness has been dissipated because it has not been properly used. Likewise hundreds of thousands of dollars have been spent in national advertising, creating leads that have come to naught because the contractor and dealer have not been geared up to take advantage of them.

I don't care whether you go in for straight electrical contracting, whether you run a purely electrical specialty shop or whether you combine electrical contracting with the merchandising of electrical supplies and appliances, you will fall far short of the success you can achieve unless you get away from the idea that your business is different from any other business and begin to build your business the way the other business is built.

Under present conditions you are particularly fortunate in being able to call upon and receive plenty of coöperation from both the manufacturer and jobber. If you avail yourselves of this assistance you will hasten the day when you can be independent of it. If you don't build your business with this assistance you will have to build it without. You cannot stand still. If you aren't big enough and smart enough to create the outlets for this electrical merchandise, the demand for which is growing enormously every day, some one else will and your friends will have to turn from you. Ultimately there will be many channels through which this merchandising will flow. In the very nature of things there must be. It's absolutely up to you to do the same things that others are willing to do to beat you to it. You have the advantage now.

Always remember that in coöperation there is economy. In union there is strength. If the manufacturer or job-

ber is your friend and is helping you to build your business for God's sake and your own sake stick to him. If generous advertising is creating a demand for an article and sending customers to your store for that article, if the article has merit and you feel you can stock it, get behind it and push it. Don't begrudge it any support you can

give it. And if you don't like it and won't sell it, pick something out that you can get behind.

The more you coöperate with your manufacturer and your jobber the more they will be able to coöperate with you. Did you ever realize that most men can finance an adventure only because some one back home is carrying the

burden and conserving the family resources? Did you ever realize that there wouldn't be any raiders if there wasn't a base of supplies? It's the steady persistence of the loyal, devoted friends in business that make it possible for everyone of us to indulge occasionally in a commercial flirtation and it's wrong, dead wrong.

Value of Electrical Merchandising to Contractor, Jobber, Manufacturer and Central Station

BY FRED B. ADAM

The Following Paper Was Read Before the St. Louis Electrical Board of Trade by Mr. Adam Who Has Had a Broad Experience in the Electrical Field

When the Chairman of the Contractors' Committee wrote me that I was to read a paper before you on the value of electric merchandising from the viewpoint of the contractor, jobber, manufacturer and central station, I took it for granted that he was mostly interested in the contractor's viewpoint of the subject.

In the first place, I am still of the opinion that the development of a few more real electrical merchandising stores would be a benefit to further develop the business.

Now first, let us consider the progress made by the comparative few of us who possessed the vision and had the courage to pioneer in the distribution of electric household appliances. During recent years great things have been accomplished in the development, production and sale of household appliances, such as the heating device, the washer, the ironer, the vacuum sweeper, the sewing machine, dishwasher, range, and a hundred household helps.

Many millions of dollars have been spent in educating the public to the use of such appliances, until today the demand for electrical merchandise of this character is growing steadily day by day and statistics show that there can be no lessening of this demand for years to come. To emphasize this point, I am going to quote you some statistics supplied by the Society for Electrical Development, and other sources which I consider reliable.

From July, 1917 to July, 1918, the number of vacuum cleaners sold in the United States amounted to 313,318. In the following twelve months up to July 1919, the sales numbered above 500,000 and in the year following reached 750,-

000 cleaners. Take the washer, during 1919—fifty million dollars' worth of washers were sold, which at an average price of \$150 each, represents over 333,000 washers. Based upon the increase in demand from year to year, it was estimated that the volume of sales on washing machines would reach one hundred million dollars for the year 1920, and gentlemen, I am prepared to say that when the information is compiled, the result will not be far off. Just think, over 600,000 washers were sold during the twelve months just ended.

I am told that nearly all estimates for 1920 will be reached when the final results are known, and as a matter of information I am going to cite a few of these estimates which I am sure will surprise many of you and which I trust will set you all to thinking.

Estimates for 1920 In The Sale of

Lighting Fixtures, shades and reflectors	\$245,000,000
Washers	100,000,000
Cleaners	40,000,000
Portable lamps.....	50,000,000
Fans	25,000,000
Irons	17,500,000
Ranges	13,500,000
Ironers	10,000,000
Percolators	3,400,000
Heaters	3,600,000
Heating Pads.....	1,350,000
Toasters	2,400,000
Sewing Machines.....	6,000,000
Small Motors.....	5,000,000
	<hr/>
	\$522,750,000

Now, for a moment let us study the cause and effect of this remarkable growth. Probably the impetus given to the broad sale of household appliances during these more recent years, was due to the effort of the housewife to solve the servant problem—but it is the beginning of an era of efficiency in the

home, brought about largely by the real utility of these appliances that will continue to result in constantly increasing sales.

Both the housewife and her maid have learned that they are capable of larger and more pleasant duties and both are willing and anxious to let machinery do the drudgery of the household. This is an age of progression, and we must bear in mind that every satisfied user of an electric appliance is sold on the idea of "Do it Electrically," and must therefore continue to carry on with the electrification of the home.

More to be Done

Statistics show that the possibilities of the present day market for electrical merchandise have scarcely as yet been touched. Only a third of the homes in the United States have electricity. The remainder, fourteen million, are still unwired—a condition that will no doubt be overcome within the next ten years. Five million of these unwired homes are within reach of central stations now.

The Society for Electrical Development points out that the estimated total number of electrical appliances sold to the end of 1919 was 15,000,000. The wired dwellings in this country number 6,291,000. This means that there are in use, an average of only 2-1/2 appliances per residence. Now when we consider that there are over 3,000 uses for electric service, it is easy to justify my belief that the present day market has scarcely as yet been touched.

Since we have touched upon the progress of this business and indicated what the future promises, let us consider to what extent the contractor, jobber, manufacturer and central station can profit in a larger measure by in-

tensively participating in the growing development.

Take the contractor. The most profitable portion of his business is seasonable. He is frantically busy during certain months, and frantically idle during others. Much of his gray hairs is the result of the worry occasioned by the necessity of holding his organization together over dull periods without the loss of the profit earned during his busy period. His business is not stable in the sense that he enjoys a fixed and certain volume of business throughout the year, and in consequence the earnings from his business are to say the least, uncertain.

If he would only realize it, electrical merchandising offers a solution of all his difficulties because properly organized and functioning, this would supply profitable work for his organization through the dull seasons which now confront him each year. Special selling campaigns conducted by his merchandising forces during the dull season in his contracting business will provide plenty of work in the way of extensions to wiring installations, new outlets and switches, additional capacity to customer's wiring, in repair work, etc., ample to keep his contracting organization busy. It is an interesting fact that the regular line of wiring business is always considerably improved by reason of the merchandising business.

Make No Mistake

Don't assume now that I am advising the contractors to enter the merchandising field for the sole purpose of stabilizing the contracting business. Not at all. You will make the mistake many so-called contractor-dealers have made and come to grief, if you consider your merchandising business simply as a source of auxiliary profit. The merchandising business must be made an actual part of the business, and given as much—and at the start, in fact, more—thought and time as the contracting business. Otherwise it would not be wise to go into it.

I resort frequently to the use of the word merchandising. I want to make it clear to you that merchandising means either success or failure in this field. Now merchandising is as old as the world itself. The underlying laws and principles which govern the business of supplying the needs of men and women are very old, very fixed and firm. Methods of advertising, display, selling,

etc., are in a state of constant evolution, but the underlying laws which govern the business of the successful electrical merchant are no different than those which govern the successful merchant in any other field.

Character, Capital and Capacity are the requirements of the successful electrical merchandiser.

The *character* of a merchant is reflected throughout his organization, in the goods he sells and the service he renders his trade. A business devoted to rendering sterling service, and governed in its dealings with its trade by high motives of honesty and integrity comes to be respected and widely patronized.



Fred B. Adam

Capital is of course, of very vital importance, and the earnings of your electrical merchandising business will fall in direct ratio to the capital you have invested. Inadequate capital has been the direct cause of the majority of failures in business. A given volume of business requires a given amount of capital invested.

Consult Other Interests

I should advise those of you who are planning to enter this field to make a careful and deliberate analysis of your plans. Consult freely those with whom you will be associated in your new venture. You will find your jobber has a very thorough knowledge of your problems—it is a part of his business to protect you from the pitfalls you are sure to encounter if you attempt this new venture blindly—since your suc-

cess or failure affects his business as well as the manufacturer's and the central station's.

Remember that the jobber and the manufacturer have been in a great measure responsible for the remarkable development of this business and no group of interests who could accomplish so much would likely be so stupid as not to know the possibilities of your market, the problems you are to meet, and the capital you must have to accomplish a fair return on your investment.

Consult with others, and shape your plans carefully, and you will protect yourself in a large measure against failure.

By *capacity*, I mean the capacity to merchandise, the executive ability to organize the business and to supervise its direction. It is not expected that you will at once possess the training so necessary to successfully manage this new phase of your business. You should at once select an assistant to take charge of this department—if you can afford it, get at once a trained merchandising manager. You will find that this will pay in the long run.

These requirements are necessary to any one entering into this business. I mention it particularly with reference to the contractor because the opportunities for introducing this class of merchandise are particularly available to him.

The contractor has probably the best chance of any one to get in touch with the owners, because he is on the job when the house is built, and has taken care of the repairs ever since, so he is absolutely a necessity to wire up the old job for new outlets or new circuits to take care of the devices and appliances that are being sold from the electrical merchandising store. Then the owner would much prefer to purchase the device or appliance from the person that installs it, and make sure that it will give satisfactory service. I can't help but reiterate that the contractor's wiring business is very much improved because of the all-year-round business for extensions, new outlets and repairs from regular customers.

He will be agreeably surprised at the increased amount of business that he gets, but this is only the result of the advertising that he must do as a merchandiser, in either the newspapers if he has a downtown store, or circularizing the neighborhood if he is in one of the residential district business centers.

The Jobber's Duty

Now let us turn to the jobber, who also represents the manufacturer. He has a very important function to perform. If he is to expect to enjoy his share of this business, he must be careful to select dependable lines, attractive merchandise, and such that is capable of affording the user long and satisfactory service. He must carry a complete line, maintain ample stocks and supply adequate and prompt service.

In addition to this, the jobber has a very important duty to perform in assisting the retailers to solve their problems. He is in a particularly good position to study and analyze the management of the retailer's business since he is in close contact with retailers throughout his territory and it will surprise many of you to know the wealth of counsel, information and sound advice available to you from those jobbers who having foreseen the possibilities of this business, have spared no effort to organize their business in preparation for your needs.

The jobber has shared with the manufacturer in the missionary work of bringing this business up to the volume now enjoyed by merchandisers in this country.

Now as to the central station, I wish to state that the successful contractor-dealer or the successful dealer, has nothing to fear from such competition today. The central station has finally discovered that it *can* actually *sell* at a profit electrical merchandise and not only increase the use of electric service with the merchandise they sell themselves, but at the same time help to build up a selling organization by contractor-dealers and other electrical merchandisers, many times multiplying the results that they could accomplish with individual effort.

Only Scratched the Surface

I believe you will all be surprised to know that from what I can find out by careful investigation, a conservative estimate of the sales of less than a dozen electrical merchandisers in St. Louis aggregate over a million and a half dollars during the past year, and I believe that we have only just scratched the surface of the business at that.

I cannot help but mention that the electrical merchandiser will find only a spirit of coöperation in the central station organization.

I am afraid I shall try your patience with my already long discourse if I

were to attempt to do the manufacturer justice, so in passing I shall pay him tribute for the work he has already accomplished. Consider the value the producer of such wonderful conveniences as the household appliances is to humanity. Consider the time and money spent in developing these appliances to the degree of perfection required to make them commercially saleable. Consider the problems of production, distribution and sales already solved, and you will gain some appreciation of the tribute due the manufacturer for what has been accomplished—and you will realize to some extent his interest in the continued development of this effort in the industry.

Preaching by Wireless

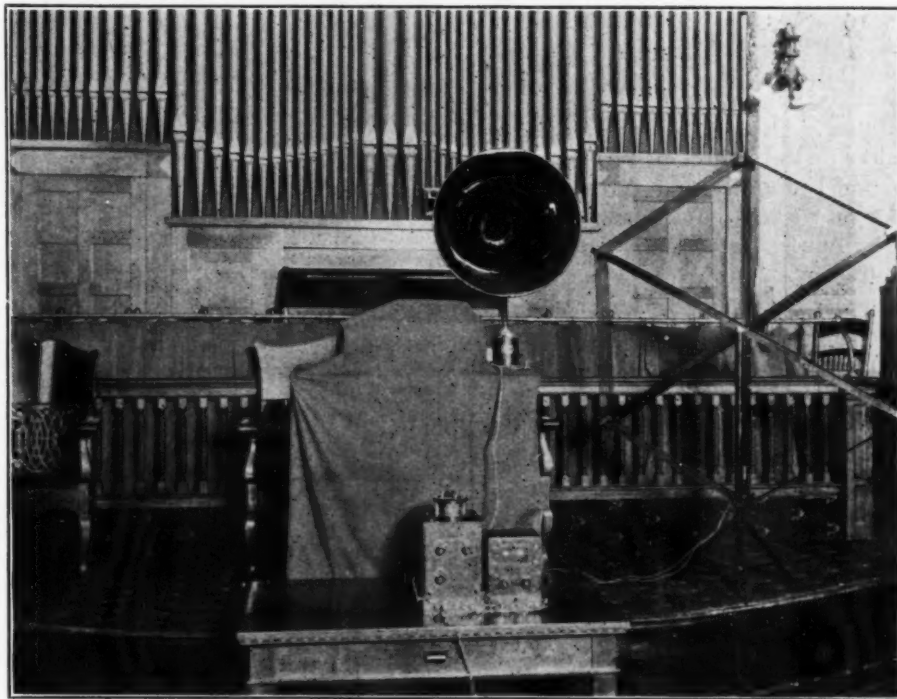
For the first time so far as known, wireless telephony has been used to transmit services from one church to another in order that a congregation without a regular pastor could have the benefits of Sunday evening worship. The churches were the Calvary Episcopal and the Herron Avenue Presbyterian, both of Pittsburgh.

During a period of months the Sunday evening services of the Calvary Episcopal Church have been broadcasted from a radio test station in East Pittsburgh. These services have been eagerly awaited by radio amateurs all over the United States.

The Herron Avenue congregation has been without the services of a regular pastor for some time. One or two of the congregation being wireless enthusiasts got in touch with the Westinghouse Company, requesting it to install a small receiving outfit in the church in order that members could hear the Calvary services. This was done and a compact set consisting of a loop antenna, amplifier and condenser was placed upon the rostrum in front of the pulpit. The loudspeaking horn rested directly on the pulpit.

An expectant throng filled the church and were not disappointed for the voices and music of the Calvary choir, rector and organ were received clearly and distinctly. In spite of the difference between Episcopal and Presbyterian services, the latter congregation followed the pastor in the former throughout. Even during the offeratory hymn, contributions were accepted. During the sermon of the Calvary rector, intense interest was maintained at the Herron Avenue church so clearly and distinctly was the message received.

It is hard to say just what demonstrations like this will lead to, but certainly it proves the great flexibility of wireless telephony. There may be in the future a central pastor who will talk to thousands of congregations situated in all parts of the world, but this may take time. The idea is not farfetched by any means, as the transmitting of the Calvary services proves.



Invisible Minister Preaches to Congregation



• CONTRACTING •

A Department Devoted to the Study and Discussion of the Practical Problems of Electrical Contracting

ALLAN COGGESHALL

Associate Editors

HENRY F. RICHARDSON



(Generators and Generator Connections —Continued)

An industrial plant or large building of any kind, may derive its electrical energy either from the mains of an electric light and power company or from its own generating plant.

In many cases engineers will differ as to the wisdom of installing a private generating plant. Always there will be pros and cons to be considered, but doubtless there will continue to be real justification for the construction and installation of private plants in many cases, at least for a considerable time to come.

It is indeed fortunate that this very controversy exists, and that there are at times rather fierce arguments on the subject of isolated plants versus public utility service. This situation can hardly help but have a healthy influence on the further development of the art and also on the prices charged for electric service.

When the installation of a private plant is deemed advisable and is decided upon, a new set of factors is introduced into the problem of the electrical equipment and wiring of the building. Expert knowledge is required on the subject of steam engineering or hydraulics and further knowledge on electric power plant practice is also required. Incidentally the electrical contractor is thus given a further opportunity to display his knowledge and to make his contribution toward the development of the best arrangement of power plant, switchboard, etc.

The choice of prime-movers and their relation to other steam requirements of the building, such as heating, use of process steam, etc., opens up a big problem which rightly belongs more in the province of mechanical engineering. The choice of the nature of electrical service to be provided, however, and the type of generator and the number and size of units to be employed are more nearly purely electrical problems. These latter choices depend on

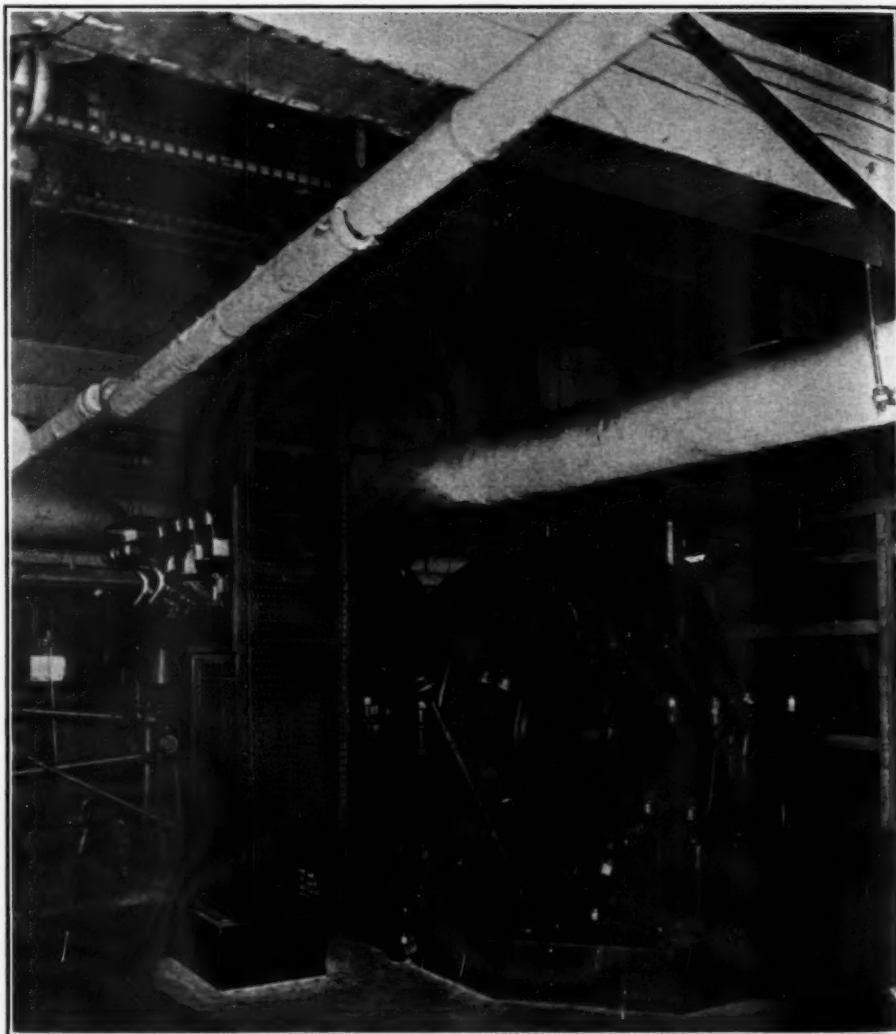
a number of factors such as the nature of the load to be carried, the periodicity of peaks, the voltage and nature of the public utility service available, if change over or breakdown service must be considered, the style and quantity of motor equipment on hand, the nature of elevator service required, the probable future developments and so on.

The investment involved in the installation of a private plant is so considerable, and its effect on the future occupancy of the building is so marked that decisions should not be made lightly, and the best and most competent

advice will be found to be cheapest in the long run.

Assuming that proper decisions in the directions indicated above have been made, and that the problem of electric wiring of the generators and their connection to the feeder system is the problem then to be put up to the electric contractor, there are then a number of interesting points to be considered by him.

The methods of carrying the leads from the generators to the switchboard are subject to considerable choice. For example, they may be run in iron con-



Showing Use of Overhead Bus Bars for Generator Lead Connection to Switchboard With Circuit Breaker Located at Machine

duits under the floor using lead covered or rubber covered cables; they may be run in a trench without conduits, in which case lead covering is imperative; fibre conduits may be used, or leads may be run over head as open wires supported on insulators and racks or overhead conduits may be run. Bus bars may be used instead of cables, and these may be run over head enclosed in grills or may be run in a floor trench.

The method of control selected has also an important bearing on the lead question. For example, if centralised control is imperative, the leads from all generators must of course be brought to the switchboard and the paralleling arranged for on the bus bar connections there. On the other hand, if the generators are widely separated real economies may sometimes be instituted by running a group bus bar common to all generators and then placing the switching devices right at the machines themselves. In this case the switches or circuit breakers may be either hand operated or remote control and, of course, proper instruments must be provided for paralleling and indication of amount of load carried by each machine.

In the matter of control and protection of generators, modern practice has developed certain rather radical departures from the practice of a few years ago. For example, with A. C. Generators, it is now common practice to make no provision in the generator leads or generator panel for overload protection of the machine. Every feeder leaving the switchboard is protected by an overload device and reliance is placed on these latter protections to safeguard the plant from exces-

sive overloads. A mechanical opening and closing device is provided for each generator so that machine may be quickly thrown on or off the line, but no automatic feature is included in the standard arrangement. A. C. Generators as a rule are not damaged by momentary heavy overloads, and if automatic overload protection is placed in generator leads it means that an overload would throw out one generator after another until the whole plant is shut down, rather than let the affected feeder merely clear itself.

Another modern device that has recently shown marked development, is the temperature indicator. This may be automatic in operation or merely indicating. An exploring coil or thermal couple is placed in the iron core of the heavy current, stationary winding and is connected with an instrument on the switchboard or generator panel so as to give instantaneous readings of the true temperature of the machine.

The theory behind this practice is, that the temperature of the machine is a better guide as to its capacity for overloads than the current reading. So long as the temperature does not rise to an excessive limit it matters very little what the current is since it is the heating effect of the current that really determines the safe operating condition of the machine. This means that if the overload on the machine is of short duration, that the heating effect will be small, and it will be entirely safe to let the machine experience a number of apparently excessive overloads as judged by current readings only, without causing any damage at all. This has the effect of instituting real economy of operation, since it means that a ma-

chine is kept fully loaded and a new machine is not thrown onto the line as soon as would otherwise be done, if current rating were used as the sole criterion of safe loading.

With D. C. machines overload protection in the generator leads is still thought advisable. The limits of safe overloading of a D. C. Generator are determined by the heating of the conductors and the flash point of the commutator. It is not so simple a matter to register the running temperature of a D. C. machine as the exploring coil or thermal couple must be placed in a stationary position of the machine which in this case would be a field core. The field core, while it is surrounded by the series field winding which carries the armature current, does not in any true sense register the operating temperature of the conductors or core of the rotative armature. Therefore, to insure against the disruption effects of heavy overload currents, it is extremely advisable to employ overload circuit breakers in the generator leads. These breakers, however, should be set so that under normal conditions the circuit breakers or fuses in feeder circuits will blow, in preference to the generator breakers.

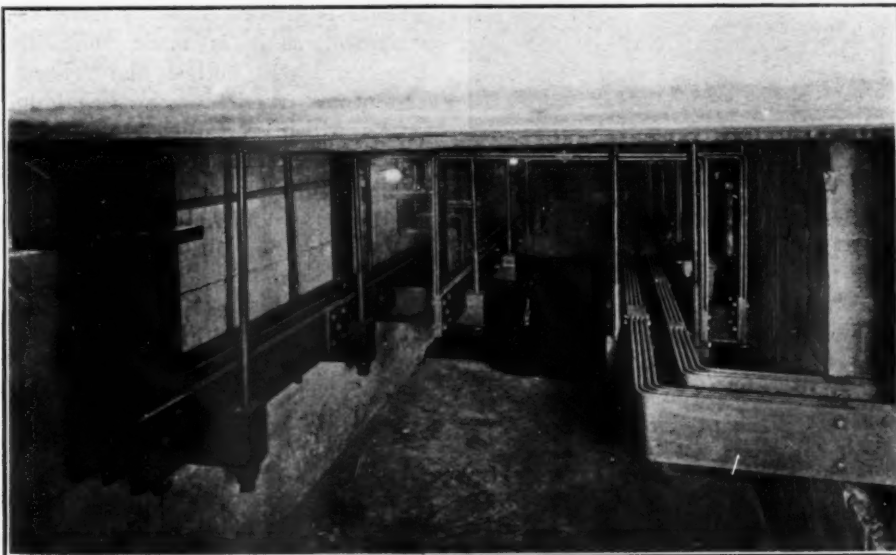
Temperature indicators on D. C. Generators are nevertheless of advantage and by proper calibration the temperature readings of the series field coils should give a very close measure of the temperature of the armature which in this case is the vital part.

The method of using a group bus bar with switching panels located at each machine is just as applicable to D. C. as to A. C. Machines. Quite often even when the main leads are brought to the switchboard the equalizer switches are set on pedestals near the machines and under normal circumstances are seldom opened, but are kept constantly closed.

In making equalizer connections the introduction of three wire generators and balancer sets has complicated this part of the wiring to some extent.

In the case of the 3 wire generators two equalizer leads are necessary which must be paired up properly with similar leads of other machines with which it is proposed to operate in parallel.

In the case of the motor generator balancer sets where machines are provided with interpoles, the normal method of cross connecting the series fields of the two machines is not sufficient. In addition the interpole windings



Showing Under Floor Bus Bar Construction of Generator Leads

must be brought to the switchboard by means of equalizers in order to insure proper parallel operation. Otherwise one or the other of the machines is liable to run away.

In choosing the switching equipment to be used for parallel operation of D. C. Generators there is some latitude of choice. Single pole interlocking circuit breakers may be used arranged so that the two leads may be closed in sequence. Then if an excessive overload is immediately experienced one of the sides is free to trip. While if a 2 pole rigidly connected breaker is used

a switch should be provided in series so that the breaker may be closed first and then the switch thus allowing the breaker to trip if the current should be excessive. Sometimes a single pole circuit breaker is used in one leg and a fused knife switch in the other. In no case, however, should there ever be any fuse or automatic opening protection in the equalizer line.

When generators of any size are installed some special foundation provision is made and in order that the contractor may bring his conduits or connections to the proper termination,

exact information must be available as to the location on generator of terminal block, or terminal leads with split lugs if such should be used.

If a pit is provided under the generator the use of split lugs and pig tail connections will avoid the need of careful termination of elbows at the machine, as then the conduits or trench may terminate in the wall of the pit, and the balance of the wiring connection may be stowed away in the pit, usually being taped or whipped with cord for protections.

(To be continued.)

What the Electrical Industry Owes the Public

By WM. H. McDONALD

Sound Reasoning by an Electrical Inspector From Whose Talk Before a Meeting at Rochester, N. Y., This Article is Taken

What the public expects, and what the public must get, is honesty—the truth concerning the most efficient system for them to install.

To be able to give such information, it is necessary first to obtain the knowledge that is required of you when you are called upon to figure an electrical installation. Such knowledge comes through schooling, through practical field work, and getting together at meetings of this character, exchanging ideas of what is the very best method to obtain sufficient knowledge to carry on the electrical business.

Right here I want to extend my appreciation to the electric light and power companies, both in Rochester and vicinity, for their splendid coöperation, and their staff of electrical engineers maintained by them to show the public just what can be accomplished by electricity. We know there are thousands of things that can be done, and it has been so demonstrated in our recent world war. To the contractors, I want to express my appreciation of the splendid work they are all doing in trying to raise the standard of electrical wiring.

As I look upon this gathering made up of representative men ready to serve the public in all things pertaining to electricity, which is a highly technical business and should only be dealt with by men competent and fully equipped with knowledge that they can serve the public honestly, I cannot help but feel that a great responsibility rests upon you gentlemen.

When you are called to a factory, commercial building or residence, you should be able to point out to the users

of electricity the most efficient way to install their electrical equipment so that they may get the greatest amount of benefit therefrom. If it is a question of lighting a factory or commercial build-

tem without getting on a stepladder or chair to turn on and off the electricity.

Tell Them the Truth

In many cases electricity isn't any more convenient to the housewife than gas, for when the contractors are called upon to figure a house, they fail to tell the user of electricity the truth, which they should do at all times in order to make the electrical installation convenient and a labor saver.

How much more convenient it would be for them to have their houses fully equipped with switches and wall receptacles, so that when the lady who wants to use her electrical iron, washing machine, percolator, curling iron, sewing machine, vacuum cleaner, or other electrical apparatus, could do so without any interference to her lights.

There is greater efficiency from this equipment, as it is made sufficiently strong and will outlast the cheaper class of construction, such as chainpull sockets, which are subjected to use and abuse, for which they were not designed. A common use of this type socket today consists of a hall light on the second floor with a string running above on the ceiling to a point directly over the stairway, and then down the stairs to within reaching distance of the first floor, trying to make this accomplish the work of a three-way switch. The same contraption is also used for cellar lighting.

Then the housewife goes out and says to her neighbor: "I have just had electricity put in my house, and I would never have had it put in if I knew as much then as I do now about electricity, for every time I want to use it, one of



W. H. McDonald

ing, you should see that there will be no spot left unlighted whereby accidents could occur. If it is a question of electrical motors you should see that they are of the proper size and well guarded, so that they may give the greatest amount of efficiency. In wiring residences, see that the proper chandeliers and brackets, switches and receptacles are installed so that the housewife can operate her lighting sys-

the strings running to the socket is broken, and if I want to use any of my electrical devices, I have to climb upon a chair, or stepladder to take out my lamp to find a place to get electrical connection. I supposed from what I had been told by electrical contractors that electricity was a wonderful thing to reduce the amount of labor and increase the amount of happiness."

Would Be a Booster

Now, gentlemen, if you had told this housewife the truth, she would never have to condemn her electric equipment, and she would have been a booster for electricity, whereas today she is a knocker. Wake up! I wish that those who are not here could be present, for they are the ones that are knocking the electrical business. Your presence here indicates that you are trying to get the most up-to-date method so that the public can place confidence in electrical contractors.

When called upon to give a layout of just what is the best method of light, heat and power to be installed, I am sorry that you are not protected by the same laws that physicians and attorneys are protected by, for after they have passed through all their schooling and obtain their diplomas, they must then serve at least two years in a reputable hospital or in a law office before they can place their name on the door to do business under a state law. This is demanded of them to protect the public, which I heartily endorse.

You are dealing with electrical problems, which is a highly technical business, and if not dealt with properly is a nuisance to life and property. Some of you are fully equipped with the proper knowledge; others with scarcely any knowledge of these problems go out giving advice to the public, placing their wires in a building in a most dangerous manner, which causes great fire losses, causing insurance corporations to become skeptical as to the safety of electricity in a building. If you were to see that the electrical wires were properly installed, we would have very few electrical fires, if any. At the same time we would prevent headlines occurring in our newspaper that some innocent party has received a shock from electricity that has called him from our midst.

Let us resolve that if in the past we have been guilty of doing anything that would cause destruction to life or property, that we shall not in the future continue the same practice, nor allow others to do so, when it is in our power

to prevent it, using the old saying: "Do unto others, as we would like them to do unto us."

Economy First

BY H. P. FREUND

Member of New York Electrical Estimators' Association Asks Some Pointed Questions

Of all the plans for buildings in which electrical work is required, a large proportion show that instead of complete and thorough preparation by consulting engineers, there has been very little or no thought given to provision for adequate electrical equipment.

The responsibility for securing for the owner the proper electrical installation should rest on someone. While the architect is naturally considered the owner's agent, he can not be expected to be conversant with the details of every trade. Without proper plans and specifications, the figuring of a proper layout of the work in this particular line becomes the duty of the estimator, and this estimate should completely describe the installation provided by his bid.

Frequently the estimator is given a set of plans on which there are numerous circles designating electric light outlets for which no wattage is marked, on which no local switches or receptacles are shown, no panel location given, or power service indicated, although it may be evident that electric power will be used.

What is the duty of an estimator in such a situation? Should he figure on the capacity required for each outlet and include the work he knows will be needed and which will have to be installed at a later date at considerably higher cost? Or should he allow a capacity of one 40-watt lamp per outlet and let the owner look out for the future requirements?

Before the awarding of a contract we seldom hear of an estimator calling the owner's attention to the lack of local switches, receptacles and other equipment necessary for a complete and proper installation. When plans and specifications are revised, in almost all instances the revisions are made to lower the cost of the work by omitting essential equipment and devices, thus reducing the convenience provided by electric service.

In the opinion of the writer it is the duty of the estimator to call to the attention of the owner or his agent whatever is necessary to make the installation complete.

If the building is to be a residence, there should be sufficient local switches for the occupant's convenience, enough receptacles for irons, vacuum cleaner, lamps and electrical devices; proper telephone and bell system should be included, together with whatever will benefit the owner in accordance with the amount of money available for the equipment.

In loft buildings located in districts where manufacturing is permitted, power risers of ample capacity should be provided so as to eliminate the possibility of the first tenant's motor equipment requiring for its supply the entire capacity of the riser provided, and obviating the necessity of cutting through floors for the purpose of installing electric power risers to serve subsequent tenants' lofts.

In all instances, careful planning of a complete installation before estimates are requested is most advisable.

Royal Breezes

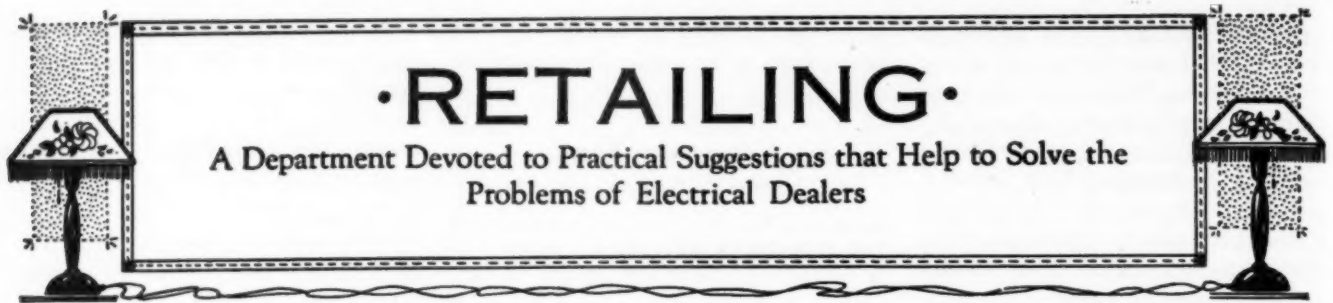
The August issue of Royal Breezes, published by the P. A. Geier Company of Cleveland, makers of the Royal electric cleaner, contains an analysis of the price conditions by F. J. Gottron, in which it is shown that the cost of appliance selling has increased more than the cost of appliance manufacturing has been reduced. Mr. Gottron suggests that as far as the public is concerned the small amount that might be saved by customers waiting for any reasonable price reduction, is more than balanced by the time and labor lost through continuing wasteful methods of house-keeping.

Another article of interest tells how an electric cleaner is used by the T. H. Symington Co., of Rochester, N. Y., in their foundry to clean fine sand from the cement floor in their core room. One cleaner does more work than seven men formerly employed as sweepers.

Mother Goose Revised

Richard A. Fooley, a Philadelphia advertising agent, has been making some revisions of the old Mother Goose jingles. Among others, the following shows how the old woman who lived in a shoe could be benefitted by modern electric equipment:

There was an old woman
Who lived in a shoe;
She had so many children
She didn't know what to do.
She got a fireless cooker
And a washing machine,
An electric ironer—
Now they're fed up and clean.



Sell Others by Selling Yourself

BY O. C. SMALL

One Way to Get Lighting and Other Business is Explained by Publicity Department of the Society For Electrical Development, Inc.

Just as a man does best those things that he wants to do, so it is with selling, because no man can put his best efforts into selling a thing he is not absolutely sold on himself.

Ask yourself this question: "What right have I to try to sell good lighting to people when I should be ashamed to invite a prospect into my own home to see an example of good lighting, when I know it is a disgrace to my profession?"

That is the crux of the whole situation and the only one that can remedy such a situation is you, yourself. We all know the story of the shoemaker's children, whose shoes, instead of being an advertisement for their father's business, were down at the heel, full of holes and unpolished.

Unfortunately the Shoemaker's children have their prototypes in the electrical industry and it is a fact that must be faced and remedied.

Think of the interest that is aroused in your own mind when in making a purchase, the proprietor of the store says: "I can honestly recommend this article because I have used it myself and it has given absolute satisfaction."

This remark could be used by you in selling appliances and in its broader sense, in selling a lighting installation—if it is true.

Let us take a leaf out of the notebook of someone else and see how it can be done.

The idea cannot be attributed to any one person, because the minds of many men have been working on this problem for a long time, but it has been crystallized by J. E. Davidson in his capacity as chairman of the public relations National Section of the N. E. L. A.

Mr. Davidson says that the best avenue to the public is through the homes

of the employes of the electrical industry.

The Duplex Lighting Works will capitalize on this; in fact, has already started to. Others will follow. It is the right kind of coöperation in the industry because it is coöperation of the rank and file to the end that they will advance their industry and perform a real and lasting economic service to the public.

The above mentioned company is sending out a series of letters to the executives of holding companies and central stations, offering to supply at cost not more than two modern home lighting fixtures with silk shades to members of the electrical industry.

Now what does this mean?

Accepting the estimate that there are 750,000 homes occupied by members of the industry, which are visited during any given month by a score of friends, it can be seen that the educational value of this offer must result in the creation of a desire on the part of thousands of people to have correct lighting in their homes. From lighting, it is a short step to creating a desire for appliances and that desire is passed on to the circle of friends of every person who has learned the lesson and like a snowball rolling down hill, it will assume tremendous proportions, represented by an increased and well sustained volume of sales, and everybody in the industry—everybody—will benefit.

Sell Yourself

What is the condition of your home in the electrical sense?

Have you a system of lighting that is something you can point to with pride?

Do you use electrical appliances?

Are you sold 100 percent on everything electrical and the fact that to do

a thing right is to "Do It Electrically"?

If you are not, how can you honestly recommend others to buy the things you sell, the sale of which is your livelihood?

What would you think of a merchant who recommended an article to you which was the last word in comfort and convenience if you found out that he did not use it in his own home?

Again we repeat: *Sell yourself first*; and selling others will be easier until it becomes *easy* by reason of your accumulation of arguments, plus your ability to say: "I use it myself."

Sell Others

A lighting installation and lighting fixtures in particular lend themselves to the admonition contained in the foregoing paragraph.

For instance:

You are soliciting a man for a house-wiring job and he wants to know what you can do and how the work will appear when completed. How effective as a sales clincher it will be for you to invite him to your own home to see a real wiring installation.

Or:

You are endeavoring to interest a prospect in the purchase of some lighting fixtures but it is hard to visualize how they will look when actually in place in a room. If you have no furnished display booth, you can offer to show the effect in your own home—always of course advising the prospect that there will be no obligation to purchase and that he or she need feel no embarrassment in accepting your offer.

No contractor or dealer should have to expend one cent to carry out the suggestion, because the work should have been done when he first started in business; but as few were so far sighted, it will cost those who have not done it a

fairly substantial sum of money, and it is worth it. The old saying of "throwing a sprat to catch a mackerel" will obtain in this case, and although it will cost money, when it is once done it is done, and you can then start to capitalize on it.

Little Acorns Overlooked

Electrical appliance dealers are overlooking an opportunity in not pushing the sale of electric cleaner attachments among customers who originally bought cleaners only, is a fact brought out forcibly by Carl N. Randall of the P. A. Geier Company of Cleveland. He believes, and his faith has been substantiated by results obtained by the company's sales force, that those who already own cleaners can be canvassed to advantage on the attachment proposition. They are preferred prospects—they already know and appreciate the value of their cleaners, and can readily be sold the complete outfit of vacuum tools. Furthermore, they consider that

the dealer is rendering them a real service in calling their attention to these labor saving devices.

Too many dealers are prone to scoff at the sales possibilities of attachments, yet every purchaser of a cleaner is in a receptive frame of mind toward the store that sold it—provided of course, that the sale was followed up and the machine is giving permanent service. Figure out the sales possibilities if each one of these satisfied customers bought a set of attachments and you'll conclude it is a truly profitable specialty to push.

It is Mr. Randall's belief that not one dealer in ten knows what the vacuum attachments accomplish in the way of cleaning curtains, draperies, upholstered furniture, cabinets, bed clothing, mattresses, pillows, cushions, clothing and furs. His first advice, therefore is "Sell yourself."

A friendly sales letter to your list of cleaner owners, inviting them to come into the store and see for themselves the unusual duties performed by the useful attachments, is a good way to

stimulate sales. Fix up a corner of the store as near like a room at home as possible, with all the fitting required to successfully demonstrate each attachment. Suggest in this letter that the prospect might bring a friend along—friends place the prospect in a more receptive buying mood, and of course, friends are also possible prospects.

Enclose a folder illustrating the various uses to which the cleaner attachments can be put—pictures are always looked at. And tie up this effort with a window display. Make it as attractive as the demonstrating room in the store, with appropriate cards hanging on each fitting descriptive of the work it will do. Some dealers have found a window demonstration effective, but of course, the store's location must be such that a large number of people are constantly passing.

"Try out this idea," urges Mr. Randall, "and with the fall cleaning season not very far off, you'll find an amount of business in cleaner attachments which will amaze you."

Helping Electrical Sales By Boosting the Home Town

By FRANK H. WILLIAMS

How the Interest of the Entire Community Can Be Aroused By Putting On a Local Products Exhibition For a Certain Period

It wasn't so very many years ago that a lot of cities in the middle west were staging very successful "Made at Home" exhibitions in which the merchants in the downtown districts permitted the use of their windows for the display of the goods manufactured in the town and in which civic pride received a distinct boost and the home town knocker was shelved forever.

These "Made at Home" events invariably attracted a lot of attention and created a lot of enthusiasm. They showed conclusively that the majority of men are strong believers in the beauty and worth and progressiveness of the city in which they live and are at heart mighty strong boosters for the old home town. These events also showed that everyone in the city whether classified as a booster or a knocker was mighty interested in seeing the goods that were manufactured in the town. In other words these exhibitions were great successes in stirring up civic pride and making people take a deeper interest in their home town.

Now in these "Made at Home" ex-

hibitions there is the germ of an idea which can be used with splendid effect by stores that are selling electrical merchandise.

Since knocking has gone out of fashion and boosting the home town is all the go, it is evident that the electrical store which goes out of its way to stand up and shout for the city in which it is located is certain to profit considerably as the result of this shouting. And the way to do this shouting is by borrowing the idea of the oldtime "Made at Home" exhibition. Borrow the idea by having a "Made at Home" exhibition of the store's very own in which the store would make exhibitions in its display windows from week to week of some of the various products manufactured in the city and during which the store would make a special play for the patronage of the workers and executives of the plans manufacturing the goods on display.

Certainly such a stunt would create a great amount of interest and would be instrumental in bringing a lot of

business to the store which it might otherwise not secure.

Let's see how the plan might work out.

Suppose that M. O. Brown, dealer in electrical goods, determines to try out the plan. And suppose that Mr. Brown goes to a local manufacturer of oil storage products and a local knitting mill engaged in making stockings and hose, and to a manufacturer of office furniture, and arranges with these concerns for the making of a display of their products in his windows during an entire week.

And suppose that after Mr. Brown has made these arrangements he tells about his stunt in his newspaper advertising in some such fashion as this:

"Announcing a Unique 'Made at Home' Exhibit in Our Show Windows All of Next Week.

"This store has always been a consistent home town booster. We believe in our own home town. We feel that it is the best city in the country in which to live and to work. And we believe that more and more people will

feel the same way as we do about the matter with the result that the population of our city will grow tremendously during the next few years.

"We also feel that the more home folks know about the wide extent of the industries in this city and the tremendous amount of manufactured products turned out here from month to month, the more pride home folks will feel in our city.

"So we have arranged to have a 'Made at Home' exhibit in our display windows during the next few weeks in which we will show some of the many products made in this city and in which we will tell something about the plants and the men and women who are engaged in making these products.

"Next week will be the first week of these exhibits. We will show the products of three leading local manufacturers in our display windows during the week. We won't tell you now what manufacturers these will be. Come to our store during the week and see for yourselves what manufacturers are represented. In connection with the display we will tell on window cards some interesting facts about these plants.

"And, furthermore, in connection with the display we will have a contest to determine who is the most popular workman employed in each of the plants. Every person who makes a purchase of us during the week will be entitled to one vote for every \$3 worth of goods purchased. To the workman in each plant who receives the greatest number of votes as being the most popular workman in his plant we will award a prize of an electric fan.

"Come and look at the display and be sure to vote for the most popular workman in your plant.

"The announcement of the prize winners will be made in our display windows and newspaper advertisements a week from Monday."

Suppose that Mr. Brown has a sufficient quantity of ballots printed to take care of the persons voting and that he bases the quantity on the approximate amount of business he expects to do during the week. And suppose these ballots are so framed that there is space for the writing in of the name of the workman voted for and the initialing of the ballot by the salesman making the sale so that the total ballots can be checked up by the salespeople's sales and thus obviate any "stuffing" of the ballot box.

Backed Up By Advertising

And suppose that Brown backs up this newspaper advertising and the advertising in his windows by circular letters to the plant employes and by notices on the plant bulletin boards which, of course, the factory executives would be glad to allow him to put up in return for the good advertising he would give them.

Wouldn't all this create a vast amount of interest? And wouldn't it be certain to greatly increase the sales of the Brown store during all the weeks that the exhibition was in sway?

Certainly a stunt of this character has all the elements of popular appeal. It has all the things that make folks talk; that make them go out of their way to look at the store's display windows; and that make them enter the store and purchase goods where ordinarily they might patronize some other store.

And certainly this sort of a stunt would interest everyone whether they were employed by the factories whose products were shown or not. And particularly would it interest the employes of the plants represented in the exhibits and be calculated to bring a lot of them into the store who might otherwise never enter the establishment, thereby making a lot of new customers and assuring

for the store a good percentage of their trade in the future.

A stunt of this kind would arouse the civic pride of everyone in the city. It would make all the employes of the plant want to cast a vote, because everyone likes to vote in a contest of this kind, as a general thing. And it would most certainly make the store talked about in an exceedingly favorable manner which could not help but be very a good thing for business.

Stage a "Made at Home" exhibition! Cash in on the civic pride of your townspeople!

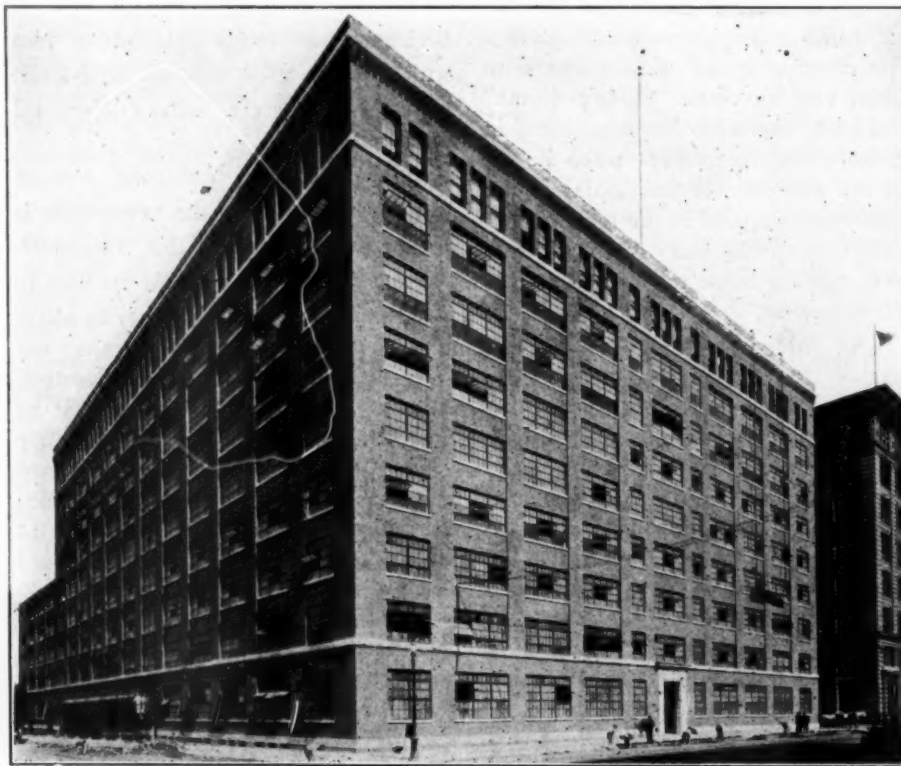
Be a home town booster in a worthwhile way and watch your store's business increase!

Good Suggestions

Michael Gross, a New York advertising expert, suggests that some concern which manufactures vacuum cleaners should swing Burns' immortal lines around a bit and use them for a slogan:

"Man's inhumanity to woman makes countless thousands sweep." Buy her a _____ Cleaner today.

Or else start off an ad after this fashion: In the modern Kentucky Home the happy housewife hums, as she plies her _____ Vacuum Cleaner: "Sweep no more, my lady; oh, sweep no more, I say."



New Building of Western Electric Company, Covering an Entire Square in New York City, Said to be the Largest Concrete Building on Manhattan Island



ORGANIZATION ACTIVITIES

A Department Devoted to the Reports of State and Local Meetings



STATE CHAIRMEN AND SECRETARIES

State	Chairman	Secretary	State	Chairman	Secretary
ONTARIO, CANADA:	K. A. McIntyre, 72 Victoria St., Toronto	J. A. McKay, 24 Adelaide St., W., Toronto	MARYLAND:	S. C. Blumenthal, 505 N. Eutaw St., Baltimore	C. Philip Pitt, 15 E. Fayette St., Baltimore
BRITISH COLUMBIA:	E. Brettell, 781 Granville St., Vancouver	J. C. Reston, 611 Howe St., Vancouver	MASSACHUSETTS:	Geo. B. Quinby, Boston	J. E. Wilson, 263 Summer St., Boston
CALIFORNIA:	C. L. Chamblin, 643 Call Bldg., San Francisco	J. W. Redpath, 643 Call Bldg., San Francisco	MICHIGAN:	Henry Roseberry, 41 Pearl St., Grand Rapids	H. J. Shaw, 613 Lincoln Bldg., Detroit
COLORADO:	J. Fischer, 213 15th St., Denver	W. A. J. Gascott, 715 18th St., Denver	MINNESOTA:	Emil Anderson, 240 Plymouth Bldg., Minneapolis	Arthur P. Peterson, 2395 University Av., St. Paul
CONNECTICUT:	E. S. Francis, 272 Asylum St., Hartford	Geo. M. Chapman, 43 E. Main St., Waterbury	MISSOURI:	W. J. Squire, Kansas City	A. J. Burns, 533 Delaware St., Kansas City
DISTRICT OF COL.	Frank T. Shull, Conduit Rd. and Elliott St. Washington	H. R. Harper, 635 D St., N. W., Washington	NEW JERSEY:	Geo. E. Davis, 23 Central Ave., Newark	Elmer D. Wilson, Newark
FLORIDA:	T. E. Satchwell, Jacksonville	J. G. Spencer, Palatka	NEW YORK:	F. A. Mott, 29 St. Paul St., Rochester	J. P. Ryan, 26 Cortlandt St., New York City
GEORGIA:	Henry Morton, 1227 Broad St., Columbus	C. B. Anderson, Walker El. & Plain Co., Columbus	OHIO:	C. L. Wall, 212 S. Main St., Akron	Walter R. Keefer, 939 E. McMillan St., Cincinnati
INDIANA:	A. B. Harris, Gary	A. I. Clifford, 507 Odd Fellows Building, Indianapolis	OREGON:	Roy C. Kenney, 388 Burnside St., Portland	F. R. Whittlesey, 212 Henry Bldg., Portland
IOWA:	Louis L. Corry, 510 Brady St., Davenport	Arthur Tucker, 619 Jackson St., Topeka	PENNSYLVANIA:	R. W. Keck, Allentown	M. C. Sellers, 1518 Sansom St., Philadelphia
KANSAS:	C. S. Smallwood, 1017 N. 5th St., Kansas City	R. S. Stearnes, 336 Camp St., New Orleans	TENNESSEE:	P. W. Curtis, Chattanooga	J. A. Fowler, 10 S. Second St., Memphis
LOUISIANA:	C. S. Barnes, 513 Gravier St., New Orleans		WASHINGTON:	S. G. Hepler	Forrest E. Smith, 205 Boston Block, Seattle
			WISCONSIN:	B. L. Burdick, 72 Water St., Milwaukee	H. M. Northrup, 25 Erie St., Milwaukee

LIST OF LOCAL ASSOCIATIONS AND MEETINGS

State and City	Local Secretary	Street Address	Time of Meet.	Place of Meet.	State and City	Local Secretary	Street Address	Time of Meet.	Place of Meet.
ALABAMA					NEW JERSEY				
Birmingham			Mon. Noon	Hillman Hotel	Atlantic City	F. P. Wright	16 Ohio Ave.	1st Thursday	Malatesta Hotel
Mobile	E. J. Hueguenot		Fri. 5:30 p. m.	Members' Offices	Jersey City	Wm. Doellner	743 Bergen Ave.	P. S. Bldg.	
CALIFORNIA					Newark	Geo. E. Davis	23 Central Ave.	1st Monday	23 Central Ave.
Berkley	J. M. Gregory	Pacific Bldg.	Fri. 8 p. m.	Pacific Bldg.	Pateron	H. M. Desaix	88 Ellison St.	Last Friday	P. S. Bldg.
Covina	F. Rambo		1st & 3rd Mon.	Ontario	NEW YORK				
Long Beach	O. W. Newcomb	308 E. 4th St.	Tues. Ev'g.	Spaulding's	Albany	E. A. Jones	31 Hudson Ave.	1st Thursday	Pekin Rest'nt
Los Angeles	H. T. Muxall	628 U. Oil Bldg.		Denver	Brooklyn	A. H. Hyle	12 Nevins St.	1st Mon.	Cham. Com.
Oakland	J. Gregory	Pacific Bldg.	Tues. 8 p. m.	Pacific Bldg.	Buffalo	H. W. Walcott	555 Wash. St.	Fridays	507 Elec. Bldg.
San Francisco	A. Elpins	165 Jessie St.	Wed. 1:30 p. m.	165 Jessie St.	Cooperstown	E. P. McCormick	Oneonta	3d Tues.	Vanon
San Nuyas	Los Angeles Am		Tues. 6:30 p. m.	Pin Ton Cafe	Endicott	B. B. St. John	Binghamton	Tues.	Cham. Com.
COLORADO					Jamestown	A. H. Hyle	309 Main St.	3d Mon.	Mfgs. Ass'n.
Denver	L. B. Roberts	227 Coronado Bldg.	2d & 4th Tues.	227 Coronado Bldg.	Kingston	Henry Lund			
CONNECTICUT					Nassau-Suffolk	M. C. Rivenberg	Huntington		
Hartford	H. D. Hitchcock	45 Preston St.	Call of Sec'y	118 Asylum St.	New Brighton	J. A. Palmer	Tottenville		
New Britain	F. Mulvehill		Monthly	192 Grand St.	N. Y. Sec. No. 1	J. P. Taylor	26 Cortlandt St.	1st Thurs.	Penn's Hotel
Waterbury	A. S. Jordan	Conn. Lt. & P.Co.		Dewey Hotel	Independent	J. P. Ryan	22 Chambers	1st and 3d Wed.	McAlpin Hotel
Washington			2d Thurs. ea mo., 8 p. m.		Sec. No. 3	L. F. Lwedecke			
FLORIDA					Ass'd. El. Con.	H. S. Beidelman	260 W. 86th St.	2d & 4th Wed.	226 W. 58th St.
Jacksonville	W. L. Joseph	155 E. Forsyth	1st Tuesday	208 Realty Bldg.	Oneonta	B. B. St. John		3d Thursday	Builders' Exch.
Miami	C. E. Pullen	Pullen-Zoll Co.			Rochester	Theo. Benz	State St.	Mon. 6:15	
ILLINOIS					Schenectady	Mr. Spengler	McClellan St.	Subject to call	
E. Moline	E. J. Burns	Rock Island			Syracuse	H. N. Smith	P. O. Box 809	1st & 3d Monday	Gas Office
Chicago	J. W. Collins	179 W. Wash- ington St.	2nd & 4th Wednesday		Troy	H. W. Boudey	First St.	1st Tues.	Elks' Club
E. St. Louis	O. J. Birmette		Sat. 2 P.M.	Arcade Bldg.	Utica	Mr. Hall	Gray Elec. Co.	Monthly	Utilities Bldg.
La Salle	Ed. Blaine		1st & 2nd Tues.	Post Hall	Westchester	I. W. Austin	White Plains	3d Fridays	
Rock Island	E. J. Burns	219 18th St.	1st & 3rd Mon.	219 18th St.	Watertown	L. B. Smith	Roth Block	Monthly	
Streator	Wm. Schroder	613 Tyler St.			Woodmere	Geo. La Salle	Westbury		
INDIANA					Yonkers	Mr. Mayer	Manor House Sq		
Evansville	C. E. Jett		Wed. noon	Y. M. C. A.	OHIO				
Gary	A. B. Harris	570 Washington	1st & 3rd Thursday	Commercial Club	Akron	L. C. Wall	12 S. High St.	Tues. 3 P. M.	Elec. Co.
Indianapolis	C. L. Skillman	29 S. Capitol Ave.	Wed. Ev'g.		Cincinnati	W. R. Keefer	939 E. McMillan	1st & 3d Thurs.	Cham. of Com.
Warsaw	F. E. Strauss	120 W. Market St			Cleveland	Geo. D. Biery	E. 95th St.	2d Wed.	Builders' Exch.
IOWA					Columbus	O. A. Robbins	Erner Hopkins	2d & 4th Fri.	Nat. Ex. Bank
Davenport	E. Burns	Rock Island	2d & 4th Mon.	Rock Island	Springfield	J. R. Yost		1st Wed.	New China Rm.
Waterloo	J. A. Harleip	Care Waterloo Elec. Sup. Co.			Steubenville	D. C. Hartford	Hood Elec. Co.	Mon. 6 P.M.	
KANSAS					Youngstown	W. Wosbeck			
Topeka	H. S. Lee	816 Kansas Ave.	Mon. Noon	Elk's Club	OREGON				
KENTUCKY					Portland	F. R. Whittlesey	212 Henry Bldg.	2d & 4th Monday	Cham. of Com.
Paducah	W. R. Kitterjohn		Last Thurs.		PENNSYLVANIA				
LOUISIANA					Allentown	A. Hill	Bethlehem	Monthly	
New Orleans	R. S. Stearnes	336 Camp St.	1st Weds.	Teocalli Hall	Bethlehem	A. H. Hill	510 W. Main St.	Last Thursday	
MAINE					Catauquus	W. T. Kleppinger		Monthly	
Portland	H. T. Boothby	222 Middle St.	1st Mon.		Dubois	C. E. Blakeslee	Bethlehem	Monthly	
MARYLAND					Easton	G. E. Hill	Bldrs. Exch.	3rd Friday	Bldrs. Exch.
Baltimore	C. P. Pitt	15 E. Fayette	1st & 2d Tues.	Elk's Club	Erie	Earl Stokes		2nd Thurs.	Und'r't's Offs
MASSACHUSETTS					Lancaster	A. Deen	1518 Sansom St.	Tues. Mon.	Builders' Exch.
Boston	J. E. Wilson	263 Summer St.	3d Thurs.	Boston City Club	Philadelphia	M. C. Sellers	10 N. Diamond	2d & 4th Tues.	Zenke's
Fitchburg	R. M. Gowell	24 West St.	1st Mon.	Fay Club	Pittsburgh	Geo. Burrows	Bd. of Tr. Bldg.		
Haverhill	H. W. Porter	681 Main St.	2d Mon.	El. Lt. Sta.	Scranton	A. J. Fowler	Dubois		
Worcester	L. H. Treadwell		2d Thurs.	44 Front St.	St. Marys	C. E. Blakeslee	E. King St.		
MICHIGAN					York	A. E. Harris			
Detroit	H. Shaw	613 Lincoln Bldg	Last Thurs.	G. A. R. Hall	SOUTH CAROLINA				
Flint	J. Markle	718 S. Saginaw	Tues. Noon	Ass'n of Com. Cham. Com.	Columbia	E. L. Caahon	Sumter, S. C.	Wednesday	Manhattan Cafe
Grand Rapids	M. Randall	Exch. Place			Greenville	E. C. DeBruhl	Ideal Elec.	Monthly	Rwy. Lt. Co.
Kalamazoo					TENNESSEE				
Duluth	Alfred L. Foster	210 W. 1st St.	1st Tuesday		Chattanooga	Carl Schneider	412 Kirby Av.	Ev. other Wed.	Tulalie Hotel
Minneapolis	Roy Constantine	2395 University Ave., St. Paul	2d & 4th Tues.	Builders' Exch.	Knoxville	H. M. Moses	615 Market St.	1st & 3d Wed.	
St. Paul	Roy Constantine	2395 Univer. Av.	2d & 4th Mon. 6:30 P. M.	Elk's Club	Memphis	H. A. Street	285 Madison Av.		
MISSOURI					Nashville	J. B. Mullen	Arcade		
Kansas City	Mr. Brown	809 Delaware	Tues. Evenings	University Club	TEXAS				
St. Louis	A. J. Dunbar	Frisco Bldg.		Am. Hotel	Dallas	P. B. Seastrunk	Lepscombe	Wed. 8 P.M.	1805 Main St.
NEBRASKA					Norfolk	K. D. Briggs	Elec. Co.	Wednesdays	Old Col. Clb.
Omaha	T. Mustain	315 Neville St.			Richmond	W. A. Cutlett	Arcade Bldg.		
NEW HAMPSHIRE					WASHINGTON		Jeff. & Grace Sts		
Portsmouth	F. C. Hatch	Kittery	2d & 4th Wed.		Seattle	T. C. Smith			
					WISCONSIN				
					Milwaukee	Henry C. Hutton	719 Majestic Bld.	2nd Tuesday	Maryland Hotel
					CANADA				
					Toronto	J. A. McKay	110 Church St.	1st Thur.	Bd. of Trade
					Vancouver	H. R. Hargreaves	Pacific Bldg.		

Associations can secure listings here by sending necessary data to the National office

Denver Electric League

Special Representative Davis Guest of Honor at Get Together Meeting

Intensive activities are now being carried on in the State of Colorado, Special Representative Davis having been engaged for a thirty day campaign which started last month. In covering the opening meeting, held on August 4, one of the Denver papers said:

Just how the wonder power of electricity may be harnessed to best serve the needs of Denver families, and especially home builders, will be effectively demonstrated by the "Electragists" of the Electrical Coöperative League, who plan to construct a model modern home, correctly wired and electrically equipped, for the instruction of the people of the city.

This home is to be built in the immediate future in a choice residence section of town, and thrown open to the inspection of the public, it was announced at the league banquet in the Shirley-Savoy hotel.

Laurence W. Davis, field organizer for the National Association, the principal speaker and guest of honor at the meeting, urged coöperative effort in advertising and selling, and the education of the community to consider service above cost.

More than 150 electragists, including forty from Colorado Springs, Pueblo, Greeley, Fort Collins, Longmont, Loveland, Golden, Boulder and Fort Lupton, attended the dinner, at which President T. O. Kennedy of the Denver League was toastmaster. It was

emphasized that homes should be wired with sufficient and proper outlets in every room for the use of the various electrical devices of necessity and comfort.

"Houses are not wired today with the view of instructing the public in the economy and convenience to be derived from the use of electricity," declared Davis, who will spend a month in Colorado furthering the objects of the association. "People are getting tired of climbing onto a chair or table to unscrew a bulb and attach an electrical appliance. If the proper outlets were made in the first place by the architect and contractor, much convenience and economy would result."

Standardized service of a coöperative nature was strongly urged, as was a more widespread coöperative advertising to bring about the desired results in the education of the public to the true economies of extensive use of electricity and electrical appliances.

"Electragists" are those who serve electricity, Mr. Davis declared in referring to the name, which may become as widely known as the word "Realtor."

An active campaign for boosting autumn business was begun at the meetings. It was said that in twenty-five days 75,000 persons visited a model home, correctly wired and equipped, that was built in Los Angeles recently. One of the results of this experiment, which is to be repeated in Denver, is shown in the per capita expenditure of \$42 for electrical needs in Los Angeles, compared with an average of \$12 per capita in other cities, it was stated.

Mississippi Meeting

Large Gathering at Gulfport on July 24 and 25

The meeting of the Mississippi State Association of Electrical Contractors and Dealers was held in Gulfport, Miss., under date of July 25 and 26. Carl J. Gates, president, presided, and in the absence of Secretary Jones, J. M. Fried, vice president, acted a Secretary until L. C. Magee of Brookhaven, Miss., was elected to fill the vacancy caused by Mr. Jones' resignation.

The reading of the minutes of previous meeting held in Jackson, Miss., were read and approved. Mayor Haydon of Gulfport made an address of welcome to the visiting delegates and J. M. Fried of Vicksburg replied to the address of welcome.

Roll call showed nearly 90% attendance of members. Members and guests totalled 103 present.

Three applications for membership in the State Association were received and five members of the State Association made application for membership in the National after addresses by W. R. Herstein of Memphis, Tenn., and J. M. Fried of Vicksburg, Miss.

A noon luncheon on the 25th was served at the Gulf Inn. The afternoon session of the 25th was taken up with addresses. J. M. Fried of Vicksburg spoke on "The Advantages of a State Association," M. P. Johnston of McComb spoke on "The Contractor Dealer As An Electrical Merchant," and N. H. Spindler of Memphis spoke on "Proper Lighting for Residences." Gen-



Snappy Summer Soiree Given by Electrical Cooperative League of Denver, Colorado, at Shirley-Savoy Hotel, August 4, at Which Laurence W. Davis of National Headquarters was the Speaker and Piece de Resistance

eral discussion followed all addresses and the meeting was very enthusiastic.

After the afternoon session the entire body adjourned to the Gulf for a swim, and it was wonderful to see all the different members of the electrical fraternity mingling with one another in the water as there were present not only the contractors, but the jobbers, and some manufacturers had representatives present.

A banquet on the evening of the 25th was held at the Great Southern Hotel. J. A. Cocoran of the General Electric Company was the guest of the evening and made a very interesting talk, likewise Percy Stern of the Interstate Electric Company of New Orleans.

The morning session of the 26th was taken up entirely with an illustrated lecture by J. A. Cocoran and a talk by W. R. Herstien. General discussion followed the talks and every dealer was given an opportunity to relate experiences that he has had which might be useful to all members. Joe Lanham of Greenwood, Miss., made a deep impression when he propounded the question: "What is the first thing to take out on a job?" After several had answered incorrectly he gave the proper answer: "Your sign advertising yourself in connection with the Job."

The afternoon session was taken up by a boat ride to Ship Island and a swim in the surf. Luncheon was served on the boat.

The next meeting of the organization will be held in Jackson, Miss., some time in, January 1922.

New Jersey Annual Outing

The annual outing of the New Jersey State Association of Electrical Contractors and Dealers was held at Asbury Park on July 30. It was the most enthusiastic gathering this association has ever had and the spirit shown augured well for the forthcoming business year.

The proceedings were opened at 12 noon by a committee meeting presided over by George Davis, president of the association, at which a number of important matters were discussed. One of those of prime importance was the Licensing Bill for Electrical Contractors and it was the unanimous feeling of those present that such a bill would be beneficial to the industry. The discussion resulted in the appointment of a committee to see that a bill is submitted to the State Legislature as early as possible.

In the afternoon the ladies were entertained at a boat ride on the lake and

the men whiled away the late afternoon session by staging a ball game between jobbers and contractors. The former, captained by Fred Rost, defeated the contractors' team, captained by Elmer Wilson, with the score of five to three.

Prior to the ball game, Ainslie A. Gray, advertising counsel for the Electrical Supply Jobbers' Association, talked to a crowded meeting on the value of advertising to the contractor-dealer. Mr. Gray showed conclusively that it is to the advantage of contractors and dealers to advertise and his talk brought out a number of questions which he satisfactorily answered. His address will be published in another issue of the magazine.

At 6:30 P. M. members and their families to the number of one hundred and fifty-four sat down to a most enjoyable shore dinner, which was remarkable for the fact that there were no after-dinner speeches; Mr. Davis having wisely decided that people had come to enjoy themselves and not listen to dissertations on business. The dinner was followed by a dance which carried the revellers on to twelve o'clock, when they decided to call it "a day."

Goodwin Presented With Loving Cup

Recently Merged Local Organizations of New York City Make Annual Outing Occasion of Presentation

It would indeed be unfair to say that the efforts put forth by Wm. L. Goodwin in behalf of contractor-dealer interests were unappreciated. Although these strenuous activities have been carried on for upwards of four years, no actual evidences of appreciation developed until the Anniversary Convention of the National Association of Electrical Contractors and Dealers last July, when Goodwin was presented with a magnificent memorial volume containing the names of the officers and members of that organization.

Following this event, the Independent Associated Electrical Contractor-Dealers of New York City, at their summer outing held in Grant City, Staten Island, N. Y., on July 30, presented Mr. Goodwin with a huge silver loving cup, as a token of esteem and appreciation.

This organization is the result of a recent merger of the Associated Electrical Contractors and the Independent Electrical Contractors and Dealers' As-



Greatly Reduced Reproduction of Silver Loving Cup Presented to Bill Goodwin at Big Outing of Independent Associated Electrical Contractor-Dealers at Staten Island, July 30

sociation, and has a total membership of 130, making it the largest local organization in that branch of the electrical industry.

While this was the first outing of the merged organization, it was also the seventeenth annual outing of the old Independents—the custom having been each year to entertain the New York City Department of Water Supply, Gas and Electricity and Fire underwriters in this manner.

There was a large attendance, something like 400 members and guests sitting down to an old fashioned shore dinner. Mr. Goodwin was the honored guest, and the presentation of the silver loving cup came to him as a complete surprise. He made acknowledgment in a characteristic speech, assuring the donors that while the spirit which prompted the gift was fully appreciated, he considers his efforts a duty and a pleasure, and entertains no thought of obligation on the part of those who enjoy the benefits.

After dinner a game of baseball was played between the Department of Water Supply, Gas and Electricity and the New York Board of Fire Underwriters. The Underwriters gave the City boys a severe drubbing. But it took them three years to do it, so it's a case of "wait till next year."

There were races of various kinds, after which a splendid entertainment was given.

Mr. Goodwin evinces no slight evidence of pride in displaying his recently acquired tokens to callers at the offices of the Society for Electrical De-

velopment in New York City, where he now holds forth as the right hand man of the president of that organization.

Dinner Meeting of Live Canadian District

The Electrical Contractors and Dealers of Kitchener, Galt and Waterloo held a dinner party at the Wagner Inn at Bridgeport on the Grand River. Frank Ellis was the toastmaster for the evening. V. K. Statford and K. A. McIntyre addressed the meeting on association work. At the close of the address the toastmaster in a few remarks advised all the contractors and dealers to join the association. As a result 8 applications were received.

The spirit and enthusiasm in evidence at the meeting would indicate that this District is going to have a real live District organization.

At the close of the evening a hearty vote of thanks was unanimously passed for the assistance of the speakers in the organization work.

Several of the contractors present intimated their intention to form a party to go to Toronto on August 22 to attend the annual meeting the Provincial Association which is going to be favored with an address from Wm. L. Goodwin and Samuel Adams Chase.

Border Cities Association

The electrical contractors and dealers of the Border Cities held a meeting on August 8. K. A. McIntyre and V. K. Statford addressed the meeting, and several applications were received. W.

J. McHenry acted as chairman of the meeting. Mr. McHenry is manager of the Waterville Hydro System and he made a very genial chairman.

At the conclusion of the addresses the chairman gave a short address on the association work from the central station manager's viewpoint and stated that his company would do everything they could to coöperate with the Association. This is the type of coöperation that helps.

The local jobbers have intimated their desire to coöperate also. Under these conditions it looks very promising for the Border Cities Association.

Wisconsin Electragists

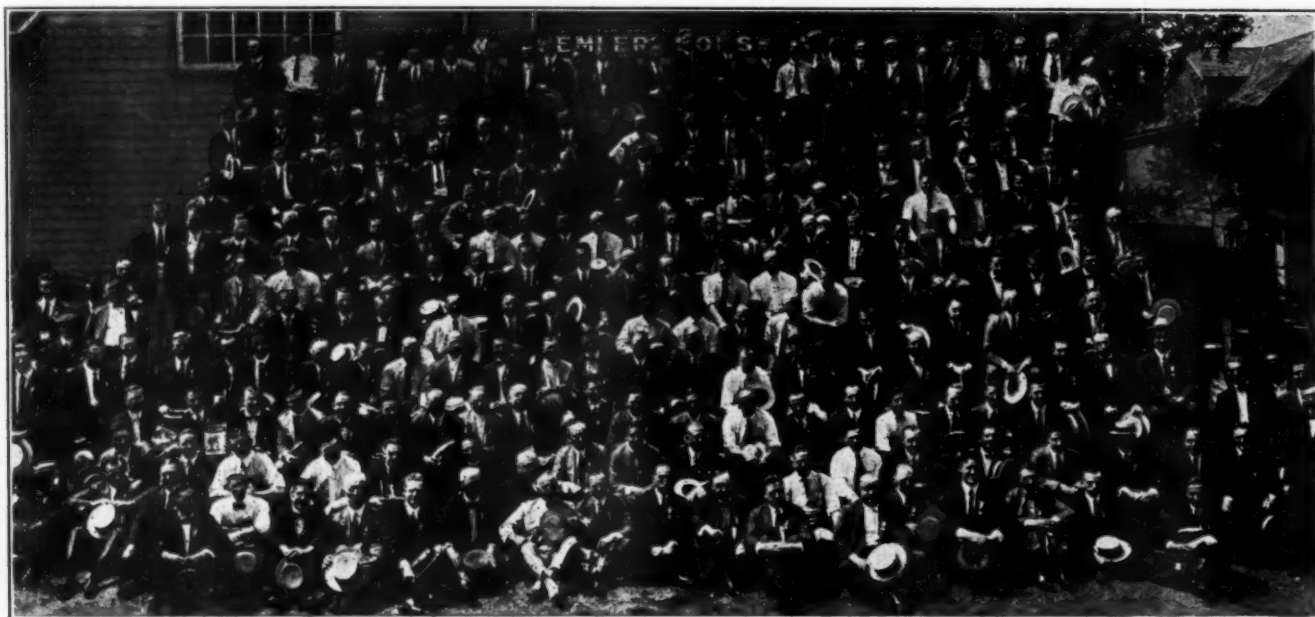
Will Hold Big Electric Show in Milwaukee Next Month

Milwaukee and Wisconsin electrical contractor-dealers will conduct a giant education and business exposition in the entire Exposition Hall of the Milwaukee Auditorium—from October 25 to 31.

Electricity will be presented in its every phase. The latest developments of this great power will be shown. An all inclusive collection of industrial and household appliances and plans will be presented.

A complete industrial plant will be erected. The most modern, economical factory lighting systems will be installed and demonstrated. An ideal home lighting display will be built. All the newest, perfected appliances for labor saving in the home will be featured.

Money, time and effort will be of-



Part of the Jolly Crowd that Joined the Outing at Midland Park on Saturday, July 30, When Bill Goodwin Was Presented With a Silver Loving Cup

ferred unstintedly by contractors, dealers, supply jobbers and manufacturers to make this the biggest and most successful event in the history of electricity. Special arrangements will be made to bring all electrical interests in close touch. Each will be informed of the activities and services of the other.

Every electragist can profit greatly through this electrical exposition. Every one should give his whole hearted co-operation. For by doing this every one, as well the electrical industry itself, will receive direct benefits and returns.

Those New Words

Utica District Association Explains How to Use Them

Under the caption "Building the Word Electragy," the following notice has been sent out to members of the local association in Utica, N. Y., in order to familiarize them with the new words adopted at the Buffalo convention:

Members of the National Association of Electrical Contractor-Dealers are now Electragists (like Metallurgists or Geologists).

At the National convention at Buffalo the following words were adopted and approved for use in connection with the business:

ELECTRAGY—The name of the business of Electrical Contractor-Dealer.

ELECTRAGIST—A person conducting such a business.

ELECTRAGICIAN—A person working at the business.

ELECTRAGIZE—A verb—to work at the business.

ELECTRAGIC—An adjective—relating to the business.

ELECTRAGIAN—An adjective—relating to the business.

ELECTRAGIAL—An adjective—relating to the business.

These words are properly derived from the Greek "electra" and the verb "ag," to lead or act. They are much needed in our business and it is suggested that members make use of them on their signs, stationery and correspondence as being up-to-date and a great improvement.

The following sentence shows the use of the new words:

"The business of Electragy was much advanced from the discussion of Electragial subjects by the Electragists at Buffalo.

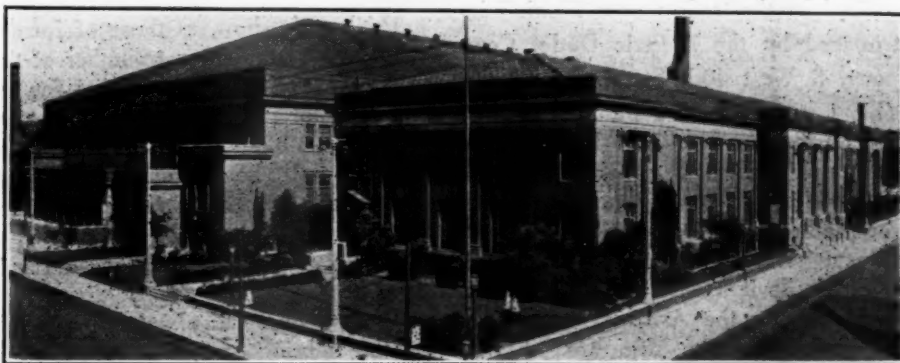
"The Electragicians were represented by the President of the Union. Efforts will be made to Electragize all buildings which lack proper equipment."

While these words are strange and inconvenient at first, they soon become familiar and repeated use quickly shows how suitable and satisfactory they are for the purpose intended.

The Utica District Members may properly feel gratified by the fact that these words and the movement to use them originated among our own membership.



Arthur P. Peterson, Secretary of the Minnesota State Association of Electragists, Posing for This Picture at the Anniversary Convention, Amid the Heavy Foliage of That Tropical City of Buffalo



Milwaukee Auditorium, Where Annual Fixture Market Will be Held January 30 to February 4, 1922. In this Same Building Will Also be Held the Food and Household Exposition on October 25 to 31, 1921, in Which the Milwaukee District of the Wisconsin State Association of Electrical Contractors and Dealers Will Hold a Big Electrical Show

Next Fixture Market

Annual Conventions and Market of Fixture Industry to be Held in Milwaukee, January 30 to February 4

Plans are now well under way for a Better Lighting Week that will completely eclipse all previous efforts by the fixture organization along this line. Representatives of the National Council of Lighting Fixture Manufacturers, of the Dealers' Society, and of the Glassware Guild, recently met in Milwaukee to go over the ground and make preliminary arrangements for their joint convention.

Milwaukee Auditorium, a mammoth building covering an entire city block, has been engaged. This structure is owned and operated by the municipal authorities who are working hand in hand with the convention committee to make this occasion an unprecedented success.

The huge size and modern equipment of this building makes it ideal for Convention and Exhibition purposes. The main hall, or arena, has a seating capacity of over 8,000 persons and exhibition space of 29,423 square feet. Directly beneath is Mechanics Hall, the main exhibition room, 256 feet long by 184 feet wide, completely equipped with wiring for both A. C. and D. C. currents. This room has 46,800 square feet of exhibition space and will hold more than 150 large booths. Six other smaller auditoriums give the building a total of 104,952 square feet of space for exhibition purposes and seating capacity for 13,520 persons.

It has a highly convenient location in the very heart of the city, being in



Standing by the Sad Sea Waves, with Water Almost up to Their Knees, are K. A. McIntyre of Toronto, and A. L. Abbott of St. Paul, Members of the Cost Data Committee of the National Association, with Mrs. Abbott Supporting Them as Ex-Officio Member. The Sad Sea Waves Role is Taken by the Waters of Niagara, Where This Trio Attended the Convention Outing

close proximity to the best hotels, business and amusement places. The people of Milwaukee are gratified at the prospect of having this convention in their city and will cooperate in making it a pleasurable and profitable affair.

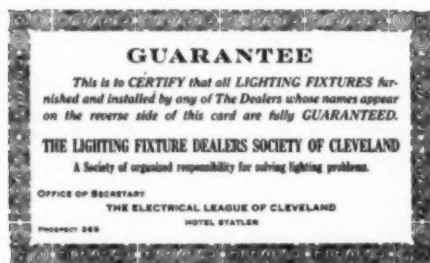
It is too early to be able to announce all the plans in detail. But the convention will be the occasion of the usual pleasurable lunches and addresses that have marked past conventions, for the holding of which the Auditorium is unusually well equipped.

As a unique feature of this convention—we're afraid we're leaving the cat out of the bag—there will be a gorgeous pageant showing the stages in lighting from the crude flaring torches of the primitive ages on through the periods of history to the most scientific and artistic achievements of today.

Nothing is being left undone to make the Milwaukee Convention and Fixture Market a landmark in the history of the industry. The exhibitors will be taken care of better even than in past markets, the booths will be more attractive and conveniently laid out—in fact, it will be an occasion which every one will remember with gratification.

Lighting Fixture Guarantee Greatly Reduced Reproduction of Fixture Dealer Club's Guarantee

One of the July issues of The Leaguer, published by the Cleveland Electric League, says that every man or woman in Cleveland building a home will be given a written guarantee covering all fixtures installed by members of the Fixture Dealers' Club of Cleveland, under a plan formulated at the



special meeting of the organization held on Monday, July 11.

The guarantee certifies that all lighting fixtures installed by any members of the club are fully insured. It covers mechanical as well as electrical construction. A complete list of members of the club is printed on the reverse side of the guarantee.

As soon as the name of a builder appears at city hall he will be sent a

copy of the guarantee. Another will be sent him in thirty days and still another thirty days later. Each dealer member of the club also will place a similar guarantee with his name on the reverse side instead of all of the names, on the dining or living room fixtures of the residence. A letter will be enclosed with each mailing.

Business Revival Meeting at Philadelphia

The Industrial Relations Committee of the Philadelphia Chamber of Commerce in its campaign for a revival of business, and to promote the industrial relations essential thereto, has arranged for a luncheon in the ballroom of the Bellevue-Stratford hotel on Tuesday, September 13.

Governor Henry J. Allen of Kansas will deliver an address and it is expected that the presidents of sixty business organizations of Philadelphia will be present.

Convention of Illuminating Engineering Society

The fifteenth annual convention of the Illuminating Engineering Society will be held in Rochester, N. Y., during the week beginning September 26.

An interesting program has been prepared and a large attendance is expected. For further information address the general offices of the society at 29 West 39th Street, New York City.

Agreement Reached on De- tachable Lighting Units

The final step has just been taken in the standardization of receptacles and plugs for lighting outlets, briefly described by the trade name "Elexit," introduced by the Electric Outlet Company, 8 West 40th Street, New York. This company and a number of wiring device manufacturers have entered into an interlicensing agreement providing for the manufacture of Elexit receptacles and plugs to the same master gauges.

Elexit devices will be manufactured and sold by the Arrow Electric Co., Benjamin Electric Mfg. Co., Bryant Electric Co., Cutler-Hammer Mfg. Co., Economy Fuse & Mfg. Co., General Electric Company, Hart & Hegeman Mfg. Co., Harvey Hubbell, Inc., H. T.

Paiste Co., Pass & Seymour, and the Weber Electric Co.

The Electric Outlet Company will continue to educate the building profession and the public generally to the advantages of having all lighting outlets finished as Elexits, and to the many uses and possibilities in electric light fittings when they have been changed from "fixtures" to "elexiliers" by the attachment of an Elexit plug.

Cantelo White, who developed the first Elexits, says that the lighting "fixture" is the vermiform appendix of the electric lighting business and that it was inherited from the necessity of conducting gas in a pipe, a condition which should no longer be allowed to restrict the public convenience in the use of electric light.

Mr. White also predicts that when people discover that they can put the light they want in the place they want it, as easily and far more safely than their great grandfathers did with candles, they will demand more electric service than they are today being urged to use.

New York Electrical Show

So great has been the interest on the part of electrical manufacturers and dealers in the coming Electrical Show in New York City, as shown in their requests for space, that practically all of the armory has been disposed of. On August 6, nearly two months before the scheduled opening, there were only twelve spaces left.

Never before in the history of the New York show has the demand for space made itself felt so far in advance of the opening. The show is to be held at the 71st Regiment Armory, Park Avenue and 34th Street. It will open on September 28 and continue ten days.

This year's show, as those of former years, will cover a great number of the uses of electricity. Appliances for reducing labor in the home will make up a large part of the show. Among these exhibits will be laundry equipment, kitchen appliances, refrigerators, house lighting fixtures, and an apartment completely equipped with wired furniture.

Central station displays will be made by the lighting companies which serve the New York territory. They will not only explain the commercial practices of the companies but will illustrate some of the operating methods.

There will be a number of displays by manufacturers of electro-therapeutic apparatus. Some of these will be the large equipment for hospitals and offices and some of the smaller devices for use in the sick room at home.

Several types of electric signs will be exhibited, and it is probably that an animated display will cover one of the armory walls.

The electric vehicle exhibit will be very comprehensive, and will include displays by the truck manufacturers and the makers of electric storage batteries and garage accessories. Industrial trucks will play an important part in the show, for they will be used to move all the exhibits into the armory. A ramp will be built from the street level up to the armory floor, and the industrials will carry their loads up this and make delivery right at the exhibitor's booth. This will eliminate all rehandling of shipments.

News Notes Concerning Electrical Contractor-Dealers

Business Changes, Store Improvements, and New Establishments Opened

N. L. Le Roy is reported to have opened a new electrical supply store at Long Pine, Nebraska.

M. Buckbee has opened a new store carrying electrical supplies at Fond Du Lac, Wisconsin.

Wm. C. Fielman and H. J. Ross have opened an electrical supply business at Wisconsin Rapids, Wisconsin.

Biscayne Electric Company of which W. H. Livingston is manager, is opening a new store at Fort Lauderdale, Florida.

Louis Collins has opened an electric and battery business at 652 Broad Street, Augusta, Ga.

Davison & Turell have opened an electrical supply business at Corbin, Kentucky.

Home Electric Company will open a new appliance store at 215 Connell Avenue, Picher, Okla.

George Wyman has opened a new electric supply store at Valparaiso, Ind.

Hrudka & Watson have opened a new store carrying electrical supplies at Two Rivers, Wisconsin.

F. A. Clark & Company will open a new appliance store at 732 South Spring Street, Los Angeles, California.

Davies Bros. have opened a new store carrying electrical appliances at Ventura, Calif.

Thomas A. Stacey has rented the west store of the new Leicht Building, Southold, N. Y., where he will carry a full line of electrical supplies.

J. E. Riddle Electrical Company is opening a new appliance store at 114 North Cataline Avenue, Inglewood, Calif.

Crawley Electric Company, of which B. Ray Dirges is proprietor, is opening a new electric appliance business at Henry, Illinois.

J. A. Hodgson will open a new electric supply store at 205 East Lincoln Highway, Rawlins, Wyoming.

S. & H. Service Electric Corporation will open an electric appliance business at 3,027 South Main Street, Los Angeles, California.

A. P. Taber Electric Company will open a branch store carrying electrical appliances at Zumbrota, Minnesota.

The Electric Shop has opened an appliance store at 102 West 3rd Street, Pittsburgh, Kansas.

Payton and Dunwiddle are reported to have opened an electric supply business at Broadwater, Nebraska.

Hoke Electrical Company is opening a new supply business at Champion, Nebraska.

J. C. Mellon will open a new electric appliance store at Rocky Ford, Colorado.

Katherine Hood, successor to A. C. Anderson, has opened a new store carrying electric appliances at San Mateo, California.

Cooper Electric Company, of which Cooper & Watson are proprietors, will open a new store carrying a full line of electrical supplies at 2,029 Fifth Avenue, North, Birmingham, Alabama.

Gordon A. Furlong is reported to have opened an electric appliance business at Alamosa, Colorado.

Jos. G. O'Neill has opened an electrical contractor-dealer business at 249 South Main Street, New Canaan, Conn.

Long & Kirkland are opening a new electric store at Gainesville, Fla.

Herald Electric Shop, of which Jerry Herald is proprietor, has opened a new store carrying electrical supplies at 318 South Main Street, Goshen, Ind.

Blersch & Lubbering will open a new electric appliance store at 720 State Street, Quincy, Illinois.

Star Electric Company, of which Gatton & Kennedy are proprietors, have opened a new business in which a full line of electrical supplies and appliances will be carried at 112 North Second Street, Vincennes, Indiana.

G. W. Bearden is reported to have opened a new electric and plumbing business at Kinsley, Kansas.

"The Wife Saving Station," of which Mr. Schneider is proprietor, is opening a new appliance store at the Pontalba Building, St. Peter Street, New Orleans, La.

Forbes Electric Company has opened a new supply store at 3,958 Pilgrim Avenue, Detroit, Michigan.

Economy Center Electric Company will open an electric supply store at 2,950 West 25th Street, Cleveland, Ohio.

Midwest Electrical Supply Company, of which Carl V. Weygandt, lawyer, 1,239 Engineers Building and others are incorporators, is opening a new electrical supply business in Cleveland, Ohio. Incorporated capital \$50,000.

Pioneer Electrical Supply Company has opened a new store carrying electrical supplies in Cleveland, Ohio. Incorporators: Morris Berick of the National City Building and others. Incorporated capital \$10,000.

Murray Electric Company is reported to have opened a new supply store at 858 Mt. Vernon Avenue, Columbus, Ohio.

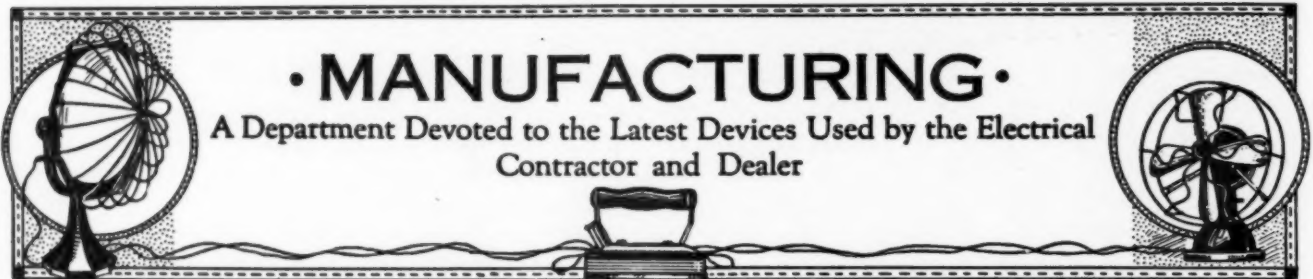
J. V. Averett Electric Company will open a new electrical supply store at Union city, Tenn.

Acme Electric Company has an incorporated capital stock of \$25,000. Incorporators: C. P. Miller, Charleston, and others.

Ray Laughlin has opened an electrical shop at the Kuhn Building, Main Street, Farmington, West Va.

Linmor Electric Company is reported to have opened a new store carrying a full line of electrical supplies and appliances at 411 Eleventh Street, Huntington, West Va.

Automotive Electric Company has opened a new electric supply, battery, and tire business at 213 North Broadway, Green Bay, Wisconsin.



New Hand Lamp

A new type of portable lamp has just been placed on the market by Russell & Stoll Company, 17 Vandewater Street, New York City.

The casing entirely surrounds the socket and extends along the lamp to a point nearly opposite the base of the filament, thus affording complete pro-



tection for the socket, as well as guarding the lamp, without interfering with the sphere of illumination. The casing is flared out to receive the "cage" or guard which is attached to a bayonet joint and locked by a screw which engages with one of the three notches on the flange.

Another unique feature of construction is the separable handle which is screwed directly on to the 3-8" threaded stem of the socket, the stem passing through a hole in the bottom of casing where the handle is fastened. This makes a simple but substantial joint and at the same time facilitates the wiring of the socket.

New Small Tool Catalog

The Greenfield Tap & Die Corporation, Greenfield, Mass., is now distributing a new and most comprehen-

sive catalog describing the small tools and pipe tools which comprise the greater part of its product.

From the frontispiece depicting its plants, to the seventy or more pages of tables and useful information at the back of the book, this catalog contains a great deal that is of interest to the user and designer of tools and machinery. Some of the tables are new and especially instructive.

The tools described include screw plates, taps, dies, drills, reamers, milling cutters, bits, arbors, countersinks, hobs, tap and drill kits, mandrels, sleeves, sockets, stocks, tap wrenches, pipe vises and pipe wrenches.

A copy of this book will be sent to any address provided the name of this publication is mentioned.

Economical and Reliable Calling System

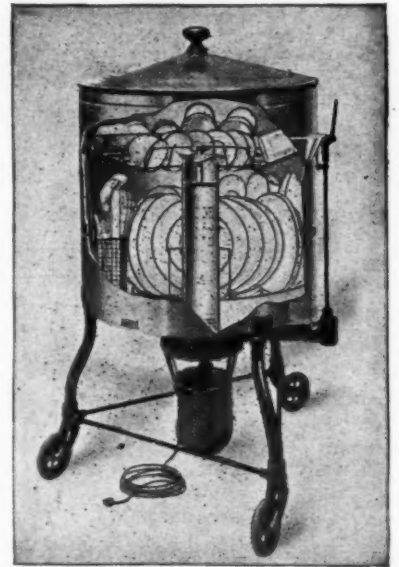
The Kode Kall, a simple, economical, and reliable calling system, due to the recent concentrated efforts of its manufacturers, is making great headway. It fills the demand for a very economical calling system that will call up to and including thirty different people. It is meeting with great enthusiasm, especially among the smaller manufacturers, offices, banks, etc.

The Kode Kall itself is not over 6 inches in width and height, and is neatly finished in black enamel. The operation is very simple—the telephone operator can set the dial at whatever call is desired within a few seconds, and then by tapping the lever on top it is immediately put into operation, sending out its message wherever the signals (buzzers, bells, horns, gongs, or whatever may be used) are located.

Although the Kode Kall is remarkably simple as to construction, it is absolutely reliable—it always works. It is unusually low in cost, thereby enabling every institution to have one. The Kode Kall is manufactured by the McFell Signal Company, 2857 South Halsted Street, Chicago, Illinois, who will gladly send complete information and prices upon request.

New Dishwasher

One of the latest appliances to be placed on the household market is the Quaker dishwasher, distributed through the Quaker Dishwasher Sales Co., 240 Cherry Street, Philadelphia, Pa. This dishwasher is made in two styles, one a portable machine on wheels is shown



in the illustration, the other a combination porcelain top kitchen table with the washer on a shelf below, thus combining two articles. As the table top is hinged, it facilitates the inserting of dishes.

The tank used is 20 inches deep and 20 inches in diameter, making a large receptacle for holding the dishes. Using 8 quarts of hot suds and operating the machine 3 minutes will wash the dishes thoroughly according to the claim of the manufacturer.

Other points in construction are the noiseless gears, lack of vibration, and absence of complication. An unusually small motor is required, the one used being a Westinghouse type ADS Universal motor, which will operate on any circuit from direct current to 60 cycle alternating current at its rated voltage. This small motor keeps the operating expense of the Quaker dishwasher very low.

Wayne Washer Offers Big Discounts

The Wayne No. 100 Rocker Electric Washer is the result of more than 30 years' experience in building washers for domestic use. The Wayne Mfg. Co., 124 Sidney St., St. Louis, Mo., is a firm



which can be numbered among the pioneers of the washing machine industry. During its existence it has built hand power machines of all types, water power, dolly, vacuum and cylinder washers. The latter type was discarded after several years of successful manufacturing because of the unavoidable complexity of the cylinder type of washers.

More than two years ago the vast experience of the Wayne Mfg. Co., was crystallized in the Rocker Electric Washer. In the designing and building of this machine they incorporated features which they knew would meet the requirements of the modern housewife.

The Wayne is of the oscillating type. This principle was chosen because it lends itself to greater mechanical simplicity than do washers of the cylinder, vacuum or dolly construction. Mechanisms for the household should be as simple as possible. In the Wayne there are only 17 moving parts. This means lack of trouble for the dealer and greater satisfaction for the housewife.

The company writes: "Our minimum discount to dealers is at present 33 1-3%, and that we have a maximum discount based on the service rendered. The Wayne No. 100 lists today at \$150. F. O. B. St. Louis, and carries very attractive discounts. This price is based

absolutely on present day cost. The Wayne formerly sold as high as \$175, but with the coming of this year we realized the importance of putting our product on a present day basis, in spite of losses which it might entail to us, because of materials on hand."

Suggestions For Lighting

Home Lighting Suggestions is the title of a new booklet being distributed by the Beardslee Chandelier Mfg. Company, 216 S. Jefferson Street, Chicago.

Chandeliers with brackets to match are shown on the same page and the pages are grouped to bring together designs suitable for any particular room of the home. Hence, selecting appropriate lighting equipment for a living room or dining room is confined to the suggestions shown on a few pages. Two pages are devoted to illustrations of attractive interiors with appropriate lighting equipment, while the cover portrays, from an actual photograph, a young wife about to light her new chandelier for her chum.

It is believed that this new booklet is a decided improvement over previous forms of chandelier manufacturers' catalogs to which the trade has been accustomed. A copy of this latest and best Beardslee booklet may be had on request.

Westinghouse Publications

The new line of electric furnaces which has recently been added to the products of the Westinghouse Electric & Mfg. Company is very ably described and illustrated in catalog 9-C, which is being distributed. This type of furnace includes the multiple unit designed for use with heats of 1,800 to 2,000° F.

The Westinghouse Electric and Manufacturing Company has just printed Folder 4,456 entitled "The Center of Power". This folder illustrates the many uses of the small motor, and encourages the use of labor saving machines in the home, office, shop and farm.

Reprint No. 91 gives the operating history of some Westinghouse steam turbine units. This series covers the record of the performances of these turbines, of any trouble they have had, and some interesting features connected with their operation. There are eight articles, embracing eleven of these large units.

Application of Oil Circuit Breakers is the title of another new publication just issued, known as Special Publica-

tion 1,643. This includes a complete discussion of the application of circuit breakers.

The handy wiring tables and illumination data just issued by the Geo. Cutter Works of the Westinghouse Electric & Mfg. Company at South Bend, Ind., contains a considerable amount of data which is of interest to anyone connected with the problems of wiring and lighting offices, factories, etc. Table of foot candle intensities recommended for different classes of service are included in this booklet, and an interesting discussion of lighting installations is made.

Universal New Products

Landers, Frary & Clark, New Britain, Connecticut, recently issued a folder showing four new electric appliances added to the Universal line—coffee urn, reversible toaster, grill with oven, and this one illustrated herewith.

This Tilting Kettle—an exclusive "Universal" feature, permits water to



be poured without lifting from the stand. Made in popular "Universal" colonial design, nickel or silver plated on pure copper, silver lined. An attractive device of much refinement which it will be difficult for women to resist.

Condensed Notes of Interest to the Trade

"The Buss Short Circuit," published monthly by the Bussmann Manufacturing Company of St. Louis, is one of the liveliest little company magazines that reaches the editor's desk.

Thoner & Martens, Boston, Mass., specialists in power station apparatus and manufacturers of disconnecting and heavy duty switches, recently issued an

attractive catalog which will be sent to electricians upon request.

Add-A-Set No. 8-80 is the new 8-light Xmas tree lighting outfit, put on the market by the Peerless Light Company of Chicago, New York and San Francisco. It will prove a boon in many ways for the jobber and dealer and will create a big demand on the part of the customers, as it eliminates the unsatisfactory 16, 24 and 32 light sets. It does away with carrying over those expensive sets to another season. The jobber and dealer simply stock Add-A-Set 8-light units, which can be built up to any size, from 8 to 80, by adding these 8-light units.

A new form of sheath wire for electric heating applications has been perfected by the General Electric Company, pioneers in the field of sheath wire development. The new unit is known as the Helical coil sheath wire unit, being a decided improvement over the drawn sheath wire unit which the company has manufactured for several years, being stronger and lending itself to a wider range of industrial heating appliances.

An automatic water heater of the circulating type, for attachment to any standard range boiler and provided with a patented gravity seal against radiation, so necessary to prevent the loss of heat and consequent loss of electricity, has been placed on the market by the Automatic Electric Heater Company, of Warren, Pa. The heater is made in one size, 8 inches in diameter by 14 inches high, but may be equipped with either two or three of the 1,000 watt Sepco heating elements, giving ample range of capacity for all normal home needs.

Hygrade Lamp Co., Salem, Mass., has just prepared a new Standard Price Schedule Book, which illustrates and describes the lamps made by that company, including regular B (tungsten vacuum) and C (tungsten gas-filled) lamps, round bulb, tubular, candelabra, sign, country home lighting, daylight, electric street railway, train lighting, street series and locomotive headlight lamps.

The Western Electric Company is offering a special technical training course to a limited number of this year's high school graduates. These young men will be developed for positions of responsibility in the laboratories and drafting divisions of the company's engineering department. The offer is expected to prove very attractive, as the Western Electric laboratories are a great center of research and development in

the communication field. The members of the new class will be paid while employed.

A leaflet recently published by The F. W. Wakefield Brass Company of Vermilion, Ohio, explains the various Red Spot line of spotlights manufactured by them. The feature of the most recent model is the Wakefield silver lining or inner shell, silvered and highly polished, which cannot tarnish from seepage, nor easily dent in service.

The Triangle Conduit Co., Inc., 50 Columbia Heights, Brooklyn, New York, announce that Thomas H. Bibber becomes general manager of the company's western business with headquarters at 1,965 W. Pershing Road, Chicago. Mr. Bibber will continue to handle the production and sale of Tri Cord, in addition to his new duties.

Walter W. Templin, specialty sales manager of the Western Electric Company, has resigned in order to accept the position of vice president with the Manhattan Electrical Supply Company. He will make his headquarters at the executive offices of the latter concern, 17 Park Place, New York City.

The Westinghouse Electric & Manufacturing Company announces that the manufacture of arc lamps, arc lamp repair parts and copper luxsolite fixtures has been transferred from the Newark Works to South Bend, Indiana. Arrangements have been made so that service will be insured during the transfer of equipment to the South Bend Works.

An order for electrical equipment amounting to \$1,200,000 has been received by the Westinghouse Electric International Company from the Midi Railway of France. The order includes transformers, synchronous condensers, lightning arresters and other substation equipment.

A new vacuum cleaner that weighs only six pounds and is designed primarily for cleaning store shelves, automobile upholstery, billiard tables, clothing store stocks, barber shops, small apartments, and other work of the kind, but which is essentially practical and efficient for the multitudinous other tasks set to the vacuum cleaner, has been placed on the market by the Electric Vacuum Cleaner Company, Inc. It is called the Premier Handy.

The Westinghouse Electric & Mfg. Co. announces that a ten percent reduction on prices of practically all of industrial motors and motor control ap-

paratus, including also all direct current generators and motor generators. This is the second cut of ten percent made by this company in motor prices during this year. There is also a reduction in prices on heating appliances, such as toaster stoves, irons, chafing dishes, cozy glow radiators, etc. The new prices to take effect immediately.

The International Western Electric Company announces an important change in its foreign organization. E. C. Richardson, who has been manager of the Western Electric Company Italiana at Rome and Milan since 1910, and who also saw foreign trade service at Antwerp, has been transferred to Peking, China, as general manager of the China Electric Company, the Far Eastern subsidiary of the American electrical concern. He succeeds C. H. Minor, who has supervised the operations of the China Electric Company ever since it started business early in 1918. Mr. Minor is returning to the European organization of the International company and will make his headquarters at London.

The Columbia Dry Battery Lighting Outfit, which is in reality a small lighting system for use with dry battery current, is the newest product to be marketed by the National Carbon Company, Inc., Cleveland, Ohio. This outfit consists of one 6 volt, 2 candle power Mazda lamp, 12 feet of lamp cord, one combination switch and socket, and a sliding hook to hang up the lamp in any convenient place. The parts are completely assembled and neatly packed in a cardboard container. Unquestionably there is a steady demand the year around for such a device. Heretofore the user was obliged to resort to his own electrical knowledge in order to obtain and assemble the necessary parts that constitute an outfit of this nature. Oftentimes the purchaser would experience difficulty in obtaining all the parts at one store, and if he was not guided correctly, the home made lighting outfit might not operate efficiently on dry battery current. With the new Columbia Lighting Outfit there is no chance for the purchaser or the dealer to go wrong as this outfit has been given the necessary engineering attention to give correct results.

IS YOUR Universal Data and Sales Book kept up to date? You need it for buying, selling and estimating.